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THE WAR OFFICE

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SMALL ARMS TRAINING.

VOLUME IV

REGULATIONS FOR THE CONDUCT OF ANNUAL COURSES AND RANGE PRACTICES

1931

CHAPTER I

GENERAL INSTRUCTIONS ALL WEAPONS

1. *Introduction*

1 The annual courses, which may be considered the culmination of elementary training with small arms, are designed to produce in.—

1 The rifleman.—

Ability to —

- (a) *Fire with accuracy* —In the case of the rifle this standard of accuracy will be judged by the grouping capacity of the firer and his ability to maintain this capacity when firing application.*

* See page 29

The grouping capacity of a military shot will vary between a 4 inch group and a 12 inch group at 100 yards. It must not exceed the latter and in the case of the more efficient shots it should approximate to the former. The size of a group at 100 yards will increase in proportion as the range increases. Thus an 8 inch group at 100 yards is equivalent to an area of approximately 24 inches diameter at 300 yards.

- (b) *Take a snapshot* : *e* deal with a fleeting target.
- (c) *Produce volume* : *e* approximately 15 rounds a minute without appreciable loss of accuracy.
- (d) Fire as in (a), (b) and (c) without loss of accuracy after rapid movement.

li The light automatic gunner —

Ability to —

- (a) Prepare the gun for firing and maintain it in action.
- (b) Carry the gun and bring it quickly into action on any nature of ground.
- (c) Fire with accuracy at various rates up to 150 rounds a minute according to the requirements of various types of targets likely to be encountered in battle.
- (d) Observe fire and correct application accordingly.
- (e) Fire with effect at low flying aircraft.
- (f) Perform the duties of any "number" in the light automatic section.

iii The machine gunner.—

Ability to —

- (a) Carry the gun or tripod over long distances
- (b) Mount the tripod quickly on any nature of ground according to the available cover
- (c) Mount the gun on the tripod, load and fire it (when ordered)
- (d) Maintain the gun in action
- (e) Apply the fire of his gun in accordance with fire orders
- (f) Select suitable targets and effectively apply the fire of his gun at his own discretion when control breaks down
- (g) Perform the duties of any "number" of the sub-section

iv The individual armed with the revolver.—

Ability to handle the revolver with safety when fighting at close quarters and to shoot quickly and accurately with either hand, firing by sense of direction without using the sights

2 Practice ammunition is distributed between the various arms of the service on the following basis —

- i. To those branches of the Regular Army which fight primarily with the rifle and light automatic, i.e. Cavalry, Infantry, and R E Field Units is allotted the greatest share
- ii. To other branches of the Regular Army which are armed with the rifle and with light automatic for use in emergency and for anti aircraft defence, only sufficient rounds are

The grouping capacity of a military shot will vary between a 4-inch group and a 12-inch group at 100 yards. It must not exceed the latter and, in the case of the more efficient shots, it should approximate to the former. The size of a group at 100 yards will increase in proportion as the range increases. Thus an 8 inch group at 100 yards is equivalent to an area of approximately 24 inches diameter at 300 yards.

- (b) *Take a snapshot, i.e., deal with a fleeting target.*
- (c) *Produce volume, i.e., approximately 15 rounds a minute without appreciable loss of accuracy.*
- (d) *Fire as in (a), (b), and (c) without loss of accuracy, after rapid movement.*

11 The light-automatic gunner.—

Ability to :—

- (a) Prepare the gun for firing and maintain it in action.
- (b) Carry the gun and bring it quickly into action on any nature of ground.
- (c) Fire with accuracy at various rates up to 150 rounds a minute according to the requirements of various types of targets likely to be encountered in battle.
- (d) Observe fire, and correct application accordingly.
- (e) Fire with effect at low flying aircraft.
- (f) Perform the duties of any "number" in the light-automatic section.

iii The machine gunner.—

Ability to —

- (a) Carry the gun or tripod over long distances
- (b) Mount the tripod quickly on any nature of ground according to the available cover
- (c) Mount the gun on the tripod, load and fire it (when ordered)
- (d) Maintain the gun in action
- (e) Apply the fire of his gun in accordance with fire orders
- (f) Select suitable targets and effectively apply the fire of his gun at his own discretion when control breaks down.
- (g) Perform the duties of any "number" of the sub-section

iv. The individual armed with the revolver.—

Ability to handle the revolver with safety when fighting at close quarters and to shoot quickly and accurately with either hand, firing by sense of direction without using the sights

2 Practice ammunition is distributed between the various arms of the service on the following basis.—

- i. To those branches of the Regular Army which fight primarily with the rifle and light automatic, *i.e.*, Cavalry, Infantry, and R.E. Field Units, is allotted the greatest share
- ii. To other branches of the Regular Army which are armed with the rifle and with light automatic for use in emergency and for anti-aircraft defence, only sufficient rounds are

allotted to enable these weapons to be used effectively when required

- iii Territorial Army units are allotted a proportion of rounds consistent with their limited periods of training

2. *Preliminary training prior to the annual test*

1 Individual weapon training of the leader, the soldier and the recruit will take place throughout the year

training, judging distance, indication and recognition of targets in fire control orders and fire discipline

classification

4 This period will be known as the *preliminary training period* and will vary from a week to a month, according to the opportunities and time that have been afforded to individuals during the year

5 Use of tests of elementary training —Prior to a company, or party, being put through its *preliminary training period*, the company officer's record of standard tests will be carefully scrutinized so as to determine those subjects in which those who are about to be refreshed are least efficient

The programme for the period will be drawn up accordingly giving a larger portion of time to those subjects in which the greater number of failures to pass the standard tests is recorded.

If, for any reason, there are no records of standard tests available for any of the personnel such men must be collected together prior to the commencement of the period and tested in the various standard tests to discover their individual weaknesses.

By such methods only will full value be derived from the preliminary training period and satisfactory results be obtained from the ammunition expended in the test or classification practices.

Care must be exercised in drawing up the programme of work for the period that those N C Os and men who are known to be keen and efficient are not called upon to carry out unnecessary repetition.

Such individuals may reproduce their own best form if left to themselves to carry out special exercises either individually or working in pairs or threes they may thus attain the required standard of efficiency as a result of practice designed to produce physical fitness, nerve control and skill at arms.

6 Towards the end of the *preliminary training period* the tests of elementary training will again be applied to find out whether the training has been satisfactory, what progress has been made, and whether the men are fit to begin firing.

7. In units where it is impracticable to collect companies together for the *preliminary training period* (e.g., Territorial Army units), training should be carried out in small parties under unit arrangements.

8 Use of miniature and 30-yards ranges —Firing on the miniature and 30-yards ranges can be usefully employed during this period (*see* chapter dealing with each weapon)

9 Detached men —The commanding officer will apply that a soldier detached from his unit may be exercised at the station where he is serving with a unit of his own branch of the service

10 Coaching —

- i In order to give the young soldier confidence in his weapons and in his ability to fire with accuracy at any type of target it is necessary to ensure that he has every chance of being successful when he fires the range practices these are an advanced stage of elementary training and must precede service shooting
- ii To this end a firing point instructor will be detailed whose duty is to coach young firers, so that by getting good results they acquire that self confidence which leads to steady improvement in shooting Commanding officers are responsible that all NCOs receive the necessary instruction to make them efficient coaches
- iii The methods of coaching in the rifle and light automatic are contained in Sec 9, and the machine gun in Sec 16 Those occasions when it is admissible are detailed in the Appendices dealing with each weapon
- iv All ranks of the Territorial Army will be coached in all range practices throughout their service

3 *Range duties and discipline* *

1 **Local range orders**—General Officers Commanding will cause such orders to be framed as local conditions necessitate to ensure safety and will arrange that copies are always available for reference during practice

These orders will contain information as to the range duties required on ranges of large extent used by several units at one time. They should be as brief as possible and should contain no amplification or repetition of the instructions laid down in the regulations. The duties of range wardens should be detailed. Certificates of handing and taking over stores for daily use and return should be unnecessary.

2 **Weather in connection with range practices**—Although practice on the range should be carried out throughout the year classification practices should be fired during the time of year most favourable for individual firing.

It should be remembered however, that if any range practices are fired in inclement weather the value of the instruction is likely to be lost. This applies especially to recruits firing.

3 **Dress**—

1 *Regular Army*—Service dress marching order, as defined in para 971 King's Regulations, 1928, will be worn by trained men when firing—

(a) **Classification or test practices**

* For special instructions applicable to the rifle and light automatic or machine gun only, see the chapters dealing with each.

- (b) Instructional practices in the part of the course immediately preceding the classification or test practices
- (c) All battle practices

ii *Territorial Army*—Subject to the provisions of Territorial Army Regulations soldiers of the Territorial Army will fire their annual weapon training courses in 'Drill Order'

4 **Firing in anti-gas respirators**—It is essential that the eye pieces should be carefully inspected and if necessary cleaned just before carrying out these practices. The practices fired in respirators will be found to be easy or difficult in direct proportion to the thoroughness of the preliminary training off the range

5 **Casuals.**—

- i Every endeavour must be made to ensure that subaltern officers and other ranks of the
- ii All men not fully exercised in the annual courses with their companies will be attached to other companies to carry out the range or battle practices omitted, or, if all companies have completed their annual course a party of casuals will be formed to ensure that all men not exempted are fully exercised
- iii Soldiers who have missed the whole or a portion of the range practices and have become available to begin the battle practices with

their companies may, if they are known to be good shots, be allowed by their commanding officers to execute the battle practices and fire the range practices subsequently

6 Practices begun but not completed.—If a man has commenced firing any range practice and is prevented from completing it the points made will not count, and the whole practice will be begun again when his training is resumed

7 Supervision during classification or test practices for trained men.*—

- i During the classification practices fired by trained personnel, officers, N C Os, and men from sub units other than that which is firing will be detailed (under the orders of unit commanders) for all duties of supervising and marking
- ii Officers of the sub unit which is firing will be detailed to assist superintending officers at the firing points by identifying every man as he answers his name on the roll, and as may be otherwise necessary In rapid or timed practices their special duty will be to report on any jams or stoppages that may occur

8. Supervision during instructional practices.—For all practices other than classification, there must be equally thorough supervision by officers at the firing point, the duties in the butts during such practices will be

* NOTE —These duties are applicable to T A. units except where modified in Regulations for the Territorial Army

carried out under NCOs with such supervision by officers as may be considered necessary

the necessary look out men posted

cover No one will leave the butts until the cessation of

withdrawn

iv When cessation of fire is required the superintending officer at the firing point will give the order When all fire has ceased he will cause the red flag to be raised and the butt party to be informed

10 Accidents caused by explosions —Should any accident in the nature of an explosion cause severe

¹ The remainder of the box of ammunition in use at the time will be preserved and the description maker and date of manufacture marked on the box will be noted Everything possible will be done to facilitate

Investigation by the Chief Inspectors, by preserving the arms and ammunition concerned exactly as they were at the time of the accident. On return to barracks para 740 King's Regulations, 1928, will be complied with

11 Range discipline.—

- i No man will load any weapon or adopt a firing position until the officer superintending at the firing point has ordered the practice to begin
- ii Dummy cartridges will not be taken on any range where ball ammunition is fired except when stoppage practices are being fired. Dummy cartridges for this purpose will be taken on the range under company arrangements and will not be carried in the men's pouches. They will be accounted for on the conclusion of the practices

12. Duties of officers superintending at the firing point.—

- i It is not possible for an officer to superintend adequately more than four firers. In cases where companies or parties have been allotted more than four targets, additional officers in this proportion will be detailed to supervise classification or test practices for trained men
- ii The duties of the officer superintending at the firing point on a gallery range are—
 - (a) In classification practices for trained men, to vary the order of firing before the commencement of each practice.

carried out under N C Os with such supervision by officers as may be considered necessary

cover No one will leave the butts until the cessation of fire has been notified from the firing point

iii A red flag will be kept raised at the firing point when no firing is taking place, and will be lowered only on the order of the superintending officer This order will not be given until the flag at the butts has been withdrawn

iv When cessation of fire is required, the superintending officer at the firing point will give the order When all fire has ceased, he will cause the red flag to be raised, and the butt party to be informed

10 Accidents caused by explosions —Should any accident, in the nature of an explosion, cause severe injuries to personnel, or should extensive damage to a weapon occur during the firing of a machine gun or other small arm the officer superintending at the firing point will immediately report it to the officer commanding

The remainder of the box of ammunition in use at the time will be preserved, and the description maker and date of manufacture marked on the box will be noted Everything possible will be done to facilitate

Investigation by the Chief Inspectors by preserving the arms and ammunition concerned exactly as they were at the time of the accident. On return to barracks para 740 King's Regulations 1928, will be complied with

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- 1 It is not possible for an officer to superintend adequately more than four firers. In cases where companies or parties have been allotted more than four targets, additional officers in this proportion will be detailed to supervise classification or test practices for trained men
- 11 The duties of the officer superintending at the firing point on a gallery range are —
 - (a) In classification practices for trained men, to vary the order of firing before the commencement of each practice

- (b) To see that each man whose name is on his roll (Army Form B 189 or B 2050) is identified and fires at the target to which he has been detailed and also that he fires with the weapon which has been issued for his use, except in the case of officers and others not in possession of the weapon. For this purpose the number of the weapon to be used by each individual will be entered on the roll.
- (c) To allow no one at the firing point but the officers, the instructors, and the men actually firing or the two gun numbers required to fire an automatic weapon.
- (d) To ensure that the regulations and local orders are explained and obeyed.
- (e) To detail a non commissioned officer or man to send and receive messages on the telephone, or by signal and a non commissioned officer to superintend the issue of ammunition and collection of empty cases.
- (f) During instructional practices or when otherwise allowed by regulations to detail an instructor to superintend each man's firing.
- (g) To ensure that no more than the authorized amount of ammunition is expended.

- (h) To collect and check the butt registers from the officers on butt duty. These registers will be handed in to the headquarters of the unit to which the firing party belongs.
- (i) To ensure so far as possible by personal observation that the marking in the butts is carried out in accordance with the regulations.

13 Responsibility for examination of weapons and ammunition carriers or bandollers before leaving the firing point and range.—The officer superintending at the firing point is responsible that the weapons are unloaded and that the men are not in possession of unauthorized ammunition. He will have an examination made to ensure that these points have been attended to before the firers leave the firing point. A further examination will be carried out by the officer commanding the company or party before the company or party leaves the range.

14 Butt parties.—

- i. Permanent butt parties should not be required, companies or parties at practice usually have time to perform any necessary work.
- ii. Minor duties, such as hoisting flags &c., should be carried out by the range warden permanently employed on the range. It may, however, be necessary to detail special look out men from the butt party.
- iii. Two markers will be allotted to each target.

- iv. For classification or test practices, officers will be detailed to check the hits and supervise marking in the butts in the proportion of one officer to a group of not more than four targets
- v. A non-commissioned officer will be detailed to assist each officer on butt duty. He should not be below the rank of corporal but commanding officers may permit selected lance-corporals to undertake this duty when necessary
- vi. In classification or test practices the senior supervising officer present on the range is responsible for ensuring that only so many targets are used as will allow the provisions of para 14, iv, being observed

15 Duties of an officer on butt duty.—The duties of an officer on butt duty in a gallery range are as follows —

- i. To see that the targets are of the proper dimensions and sufficiently clean to enable shot holes to be easily distinguished, and that all old shot holes are properly patched before practice begins
- ii. To see that the butts and appliances are in good order, and to report any damage or deficiency
- iii. To explain all regulations and local orders to the markers and to ensure their observance
- iv. To allow no man to leave the butts without his order. This order will not be given until he has ascertained personally that the red flag

has been hoisted, both at the butts and at the firing point. He will not allow the red flag to be lowered until he has satisfied himself that all markers are in the butts.

- v To detail markers to the targets. In grouping practices he will make one marker at each target responsible for noting the order in which shots strike the target.
- vi To see that the targets for automatic weapons placed on the stop butts are so erected as to give the best facilities for observation of fire.
- vii To ensure that no target is lowered without his express permission. In slow practices the target will *not* be lowered at all until the officer is in front of it. In rapid practices the target will be lowered to "half mast" at the end of the time allowed, and the markers ordered to stand as far back as possible until the officer is in front of it.
- viii To cause all targets* to be lowered during cessation of fire.
- ix To regulate the exposure of targets according to the instructions laid down and to ensure that the "value of hit" is correctly signalled. In snapshooting practices to ensure that each target is correctly exposed so as to be clearly visible to the firer.
- x To check personally the target of each firer and enter in ink the value of all hits in the register, occasional shots will be entered in the columns provided for the purpose.

* Does not refer to fixed targets

No erasure is to be made. If alteration is necessary, a fine line will be drawn through the figure the correct value written against it, and the amendment verified by the officer's initial.

x1 " " " " " "

entered on the register. In the case of the week ending 31st October 1911

xii " " " " " "

register, and to ensure that all shot notes are correctly patched.

xiii In snapshotting practices the value of each shot will be signalled after each exposure.

xiv In rapid practices, after each check, to cause the number of hits of each value to be signalled on each target.

xv On the conclusion of a practice, to rule a line diagonally across the unused spaces in the register, before signing it.

16 Regulations for non-gallery ranges.—

i *On non gallery ranges* the register (Army Form B 190A), on which all hits or misses will be at once entered as signalled, will be kept at each firing point by a N C O specially detailed for the purpose.

ii Targets will only be checked on the completion of the rounds allotted in timed practices, after

occasional shots or when the number of hits renders marking difficult. The officer on butt duty will signal the warning to cease fire, examine targets, mark off all hits or ricochets, and enter their value on the memorandum (*Army Form B 67*) supplied for the purpose. He will then cause them to be signalled to the officer at the firing point (a marking disc showing the value of each series being placed on the target) who will compare them with the numbers recorded on the register, and enter the totals in the spaces provided for the purpose. The hits will then be patched.

- iii In other respects the regulations for gallery ranges will be observed.
-

CHAPTER II

THE RIFLE AND LIGHT AUTOMATIC

4. *General remarks*

1. Preliminary Training Period for a recruit.—

i In the case of a recruit, *individual weapon training* and the *preliminary training period* are identical and begin from the moment when the recruit receives his rifle.

ii The individual weapon training of recruits will be in progressive stages, and those tests of elementary

iii Recruits, before they begin firing on the miniature range, must reach a satisfactory standard in aiming, holding and trigger pressing

After an instructional course on the miniature range, recruits will fire the Empire Miniature Range Test

v Regular infantry recruits will also be taught how to fire and clean the light automatic. This instruction will not take place until the recruit has fired the Empire Miniature Range Test, and normally he should not fire the light automatic until he has fired the elementary rifle test of Table A.

2 Use of miniature and 30-yards ranges (*see* Sec 2) during Preliminary Training Period.—

1 In order to get the utmost value from the instruction carried out in this period it is essential that those responsible should realize that the fitness of an individual to begin his annual course on the open range depends upon his capacity to group his shots closely round an aiming mark.

The smaller the size of the group the first possible

refreshing period must therefore have as its aim the im-

helpful practice can be obtained with .22-inch ammunition either on the miniature or on the 30 yards range.

3 Boys.—Boys will be trained in the use of the rifle at the discretion of their commanding officers, but they will not fire any range practices.

4 Scoring books.—Every soldier will keep a record of the results of each practice, together with the prevail-

CHAPTER II

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ii The individual weapon training of recruits will be in progressive stages, and those tests of elementary

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After an instructional course on the miniature range, recruits will fire the Empire Miniature Range Test.

v Regular infantry recruits will also be taught how to fire and clean the light automatic. This instruction

2 Use of miniature and 30-yards ranges (see Sec 2) during Preliminary Training Period.—

i In order to get the utmost value from the instruction carried out in this period it is essential that those responsible should realize that the fitness of an individual to begin his annual course on the open range depends upon his capacity to group his shots closely round an aiming mark

ii The smaller the size of the group a firer is capable of making, the greater will be his chances of success

3 Boys.—Boys will be trained in the use of the rifle at the discretion of their commanding officers, but they will not fire any range practices

4 Scoring books.—Every soldier will keep a record of the results of each practice, together with the prevail-

ing conditions of light and atmosphere and the sighting elevation which he found to be necessary. The cause of any failures will be noted. The results of tests of elementary training, judging distance and zeroing should also be recorded. An official issue of scoring books (Series A B 142) is made for this purpose.

5 Exemptions.—

i Every soldier not exempted by the King's Regulations, or this manual, will carry out the full courses laid down for his arm of the service according to his category.

ii Particulars of total and partial exemptions in the various arms are given in Appendix I.

iii A soldier who is totally exempted by Regulations from firing the annual classification tests will be classified according to the standard which he obtained when he last fired.

5. *Zeroing*

1. In order that the maximum efficiency may be obtained from the rifle and light automatic, it is essential that they be correctly zeroed, i.e. that the sighting be true for direction and elevation. All rifles and light automatics will therefore be zeroed on issue, as well as at any time when there is reason to suspect the accuracy of the sighting. In addition they should be re-zeroed shortly before commencing the annual course.

2 The rifle.—

i The backsight ramps are graduated to give the correct increases in elevation for the longer ranges.

provided the rifle is correctly sighted at 200 yards. Since the increase in elevation necessary for an increase in range of (say) 100 yards is not constant at all ranges it is essential that the lowest figure on the scale (200 yards) should give the elevation required by the rifle at that particular range.

Lateral errors can be corrected by sliding the foresight sideways on its block. Vertical errors can be corrected by altering the height of the foresight. For 303 inch Mk VII ammunition there are seven sizes of foresights with a difference of 0.15 inches in height between each size. A difference of one size (0.15 inch) will give a difference of 2.77 inches at 100 yards, 8.3 inch at 30 yards and 6.9 inch at 25 yards.

ii The armourer serjeant should be present on the range when zeroing is in progress for the purpose of making the necessary corrections on the spot without loss of time. Adjustments to the foresight will be made only by using the proper cramp with which the armourer serjeant is provided and under no circumstances will adjustment be attempted in any other manner.

iv To determine the accuracy of the sighting of a rifle a group or series of shots (not less than 5) must be fired by a skilled shot who must use the same point of aim for each shot of the group or series. Provided that a good group is obtained any adjustment which may be necessary to the sighting will be indicated by the position of the MEAN POINT OF IMPACT (MPI).

relative to the point of aim. As adjustments to the sighting will necessarily be effected by the system of "trial and error," it will be sufficient to judge the M P I of the group by eye bearing in mind when changing a foresight the effect at the given range of a difference of 0.15 inch in the height of the foresight (see (i) above).

v The following table shows where the M P I for a group should be for a rifle which is accurately sighted

Range	Actual distance between firer and target	Sight Adjustment	Position of M P I with reference to aiming mark	Permissible variation in position of M P I from the correct point
Open	100 yards	200	Approximately 3 in directly above the centre of the lowest edge	Not exceeding 3 in above or below
30 yds	30 yards	200	Approximately 1 in directly above the centre of the lowest edge	Not exceeding 1 in above or below
30 yds	25 yds	200	Approximately $\frac{1}{2}$ in directly above the centre of the lowest edge	Not exceeding $\frac{1}{2}$ in above or below

It is preferable to zero a rifle by having the actual range between the foresight of the rifle and the face of the target 25 yards. The reason for this is that the rings supplied for measuring groups on miniature and 30 yards ranges are representative of the rings used for measuring groups on the open range only when the range is 25 yards.

vi The following particulars are given as a guide to ensure that zeroing shall be carried out with accuracy —

(a) Barrel of rifle —

Inside —The bore must be absolutely free from oil. Two rounds will be fired into the stop butt *immediately before beginning the test to warm the barrel*.

Outside —The rifle will be examined before the test by an armourer to ensure that all screws are tightly screwed up and that the barrel is not influenced by the fore end.

(b) Sights —To be adjusted to 200. Windgauge (if any) to be central. The backsight leaf should be tested for firmness of joint.

(c) Bayonet —Not fixed.

(d) Rest —The lying position will be adopted and the forearm and wrist (not the rifle) of the firer will be rested on a sandbag or similar form of rest.

(e) Range —25 yards (from foresight to target).

(f) Target —A plain white screen with a 1 inch black aiming mark or a "representative" target (small 200/25) mounted on a screen. If the armourer serjeant is not present the use of the representative target facilitates accurate adjustment as the target can be sent to him with the rifle.

vii When a rifle has been zeroed this fact must be recorded in the scoring book of the soldier to whom it belongs. In cases where, for some reason, it has only

been found practicable to correct the lateral error the amount of vertical error as found by zeroing, is to be recorded as being still the error in the sighting of the

the rifle

vii Should the rifle group badly it will be examined by the regimental armourer. If, after inspection, the rifle is still found to be inaccurate it will be tested as laid down in Chapter VII

3 The light automatic —

i Although "holding" is the most important factor in obtaining accurate fire from an automatic weapon it is essential that the sighting should be reasonably true for direction and elevation at all ranges. This can be ensured by carrying out the process of zeroing. The method of doing this is generally similar to that laid down

at :

ing .

on

this

other ranges

ii To adjust for elevation three heights of foresight are supplied, (H)igh * (N)ormal and (L)ow, respectively

* NOTE.—There is also a special (N)ormal foresight sometimes fitted in the zeroing of the gun in the Factory. This sight may be intermediate between either the H and N, or between the N and L.

v Generally it will be most convenient to zero guns on the 30 yards range but provided atmospheric conditions are suitable it may be done at 100 yards on the open range. Longer ranges are undesirable owing to the dispersion of the group. The following is the procedure —

A skilled shot will be selected and the distance between foresight and target will be accurately measured. An actual distance of 25 yards is most convenient. The bore will be free from oil and two rounds should be fired to warm the barrel before zeroing. The gun must be in proper working order. The bipod and the firer's elbows should be firmly rested. A white screen with a series of black aiming marks is suitable as a target when the sighting elevation is 100 yards. With a sighting elevation of 350 yards the target should be a small target (4 ft) 200/25 yards with ghost scoring circles. Shots will be fired singly (to eliminate errors due to bad holding etc.), and not less than 5 rounds will form a group. The position of the M P I of the group (which can be judged by eye with sufficient accuracy for the

available. When two or more guns require correction in opposite directions it may be possible sometimes to effect an exchange of foresights that will meet each case.

vi The following table shows where the M P I should be for a gun which is correctly sighted.

Range	Actual distance between firer and target	Sight adjustment	Position of M P I in relation to aiming mark	Permissible variation in position of M P I from the correct point
Open	100 yds	100	At point of aim	Not exceeding 4 in. above or below
30 yds	25 yds	100	Approximately $1\frac{1}{2}$ in below the point of aim	Not exceeding 1 in above or below
30 yds	25 yds	350	Approximately $\frac{1}{2}$ in above the point of aim & c in the centre of the scoring bull's eye of the small target (4 ft) 200/25 yards	Not exceeding 1 in. above or below

foresight

vii Should the gun be found to group badly it will be tested as laid down in Chapter VII

6 Grouping

1 Weapons are sighted at the factory so that when fired at a definite aiming mark under mechanical control and under circumstances which eliminate all errors in holding aiming and firing as much as possible, the shots

will be contained within a definite area which must not exceed a certain size

The pattern made by these shots on the target is said to be the 'group' formed by the series of shots fired, and the size of this group may be taken to be the capacity of the weapon and the ammunition combined

2 When such weapons are fired by individual men instead of being fired under mechanical control then the size of the group formed by the series of shots may similarly be taken to be the shooting capacity of the individual that is the measure of the capacity of the weapon ammunition and firer combined

3 When firing a grouping practice the object of the firer is to obtain from his shots a pattern on the target in which the shots will be as closely grouped together as possible. The better the capacity of the firer the smaller will be the size of the group containing his shots. Care must be taken, therefore, when firing a grouping practice not to vary the aim while firing the series of shots—usually five.

4 As it is necessary to exclude atmospheric conditions as much as possible the range for a grouping practice should not exceed 100 yards

5 The measure of a man's capacity to shoot accurately is the number of shots he can make in a given time.

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shots, the centre of the ring will be taken as approximately the mean point of impact (M P I). The distance of this M P I and its direction from the exact spot where the M P I should be will be recorded in the man's scoring book.

6 In grouping practices the position of the M P I, with reference to the mark aimed at has no influence on the value of the group. Its position is however, of great importance for instructional purposes because it affords an approximate indication of —

- i A possible error in the rifle ,
or
- ii A consistent fault on the part of the firer ;
or
- iii A combination of both

7 Should a soldier make a series of bad groups, and it is ascertained that his rifle has been recently zeroed, his aim and trigger release should be tested, and an *analysis of his faults entered in the man's score book*, together with a note of the steps decided upon for remedying them. If these measures do not reveal the cause of failure his eyesight and nervous condition should be examined.

7. Application

1 When a man has fired sufficient grouping practices to enable him and his instructor to know the size of his average group under normal circumstances, he will be instructed in applying his shots to a definite mark.

This form of practice, in which aim or sighting elevation is altered as may be found necessary, is called *application*.

At first a man is exercised in applying his fire at *slow* rates and afterwards under a time limit. When the target is exposed for a short period admitting of one or two shots only being fired this form of application is termed *snapshooting*. When the exposure is such as to enable a series of shots to be fired it is called *rapid*.

2 Relationship between grouping and application—In a grouping practice the *position* of the group with reference to the aiming mark is of secondary importance (*see* Sec 6, 6)—it is the close grouping of the shots (size of the group) that matters most.

In an application practice the *position* of the firer's group with relation to the aiming mark is almost as important as the size of the area that will include all the shots fired.

In application practices a firer must so aim and fire each shot or burst as to ensure —

- 1 That it is fired up to his best standard of accuracy so far as holding aiming and trigger release are concerned
- 2 That the M P I for a series of shots fired will coincide with the centre lowest part of the aiming mark. In varying conditions of light and wind it may be necessary to alter the elevation or the point of aim in order to ensure this

Shots near the lowest central portion of the aiming mark receive more points than those further away. A firer's score will therefore reflect his ability to group his shots as near the aiming mark as possible. Thus—the closer the grouping combined with skill in keeping the centre of the group on the point of aim—the higher will be the score.

gradually shot by shot

8 *Miniature and 30 yards ranges*

1 **General instructions for miniature ranges —**

i Practice on the miniature range should begin as

range practices

It is essential that the recruit should receive good

ture ranges is in no sense a final training, but it is a useful and economical form of instruction

iii The practices should conform to those to be fired later with 303 inch ammunition

iv Target apparatus should be suitable for —

(a) Range practices

(b) Individual battle practices

(c) Section battle practices

The elementary and other targets for use in miniature range instructional practices should be similar to those used on the classification range, and are supplied reduced to the correct scale.

v The difficulties of service shooting can only be partly reproduced *e.g.*, difficulty of estimating range, effect of atmosphere on bullet, effect of atmosphere on eyesight, shock of discharge, will all be absent on the miniature range. The windgauge, however, may be used to represent wind and the firers taught to aim off so as to correct the deflection given, acting sometimes on their own judgment, sometimes according to fire control orders.

vi Cover of all kinds can be made with sandbags; trenches should also be made where possible

vu For Details of the Empire Miniature Range Test, see Table A, Appendix I

2 Rifles and ammunition.—

i *Rifles*—The rifles used should be service pattern, 22 inch R F. The correct sighting for direct hits is about 300 yards but each rifle on charge should be periodically tested by a good shot, and a board kept in the range showing the exact elevation and deflection required on each rifle for direct shooting on that particular range. Before firing commences, the instructor will see that each rifle has its own correct sighting eleva-

will have to be given to place the M P 1 in the correct position for these targets. This elevation should also be recorded on the "sighting" board.

- ii *Fitting* *—Care should be exercised to ensure that

* This is not applicable to Household Cavalry and Foot Guards

every man fires with a rifle that fits him properly (*see* Vol I) In order that rifles with varying sizes of butt will always be available units should maintain rifles with butts of varying lengths in the proportion of one long and one short to every four of normal length

iii *Cleaning* —Rifles should be cleaned after firing 60 rounds and always before firing "rapid," and on conclusion of firing should be wiped out rag clean and left slightly oiled

iv *Ammunition* —Only 22 inch ammunition will be used on a miniature range

3 Safety precautions —

i When rifles are being loaded unloaded, or inspected, they should be directed towards the target When it is necessary to examine the targets, all men who are in position will unload and lay down their rifles on the firing point, with *bolts* open, and the red flag will be raised before anyone goes to the targets

ii Firing will take place under the personal superintendence of a qualified instructor, who will ensure that all the conditions and safety precautions are strictly observed

iii If miniature cartridge practice takes place on a classification range, the same orders for safety, &c., are to be observed as when service ammunition is used, as miniature ammunition will carry as far as 1,400 yards

4 *Range practices.*—With or without a rest or cover, various positions —

1. *Grouping* —Rings 1, 2 and 3-inch Recruits must reach a 3 inch standard

ii *Application*

- (a) Slow —At " large " and " small " representative targets
- (b) Snapshooting —At snapshooting targets
- (c) Rapid —Can also be practised, speed will be attained by quickening the aim and trigger-release. A rate of at least 10 rounds a minute is easily reached with practice

The target to be used on miniature ranges representing the " small " 4 foot target at 200 yards is actually larger than that which represents the " large " 6-foot target at 500 yards

Crossing targets are useful for practising movement of the rifle

Marking should be carried out from the firing point by means of field glasses

iii **Individual battle practices.**—Individual battle practices can be fired, using figures representing men up to 600

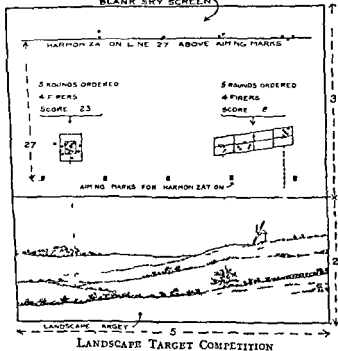
iv **Section battle practices.**—The necessity for collective fire can be shown, and many useful demonstrations and battle practices carried out, on paper or turf bank landscape targets

With the aid of these targets, instruction may be given in the description of ill defined service objects, such as areas of ground, probable enemy positions, &c

5 **Paper landscape targets.**—

i *Paper landscape targets* —The frame for landscape targets is 10 feet long and 5 feet high. Landscape pictures in sheets, 5 feet by 2 feet, are pasted on to the lower

PLATE I
BLANK SKY SCREEN



portion leaving 3 feet of blank sky screen above to receive the shots *

The sky screen should be of brown paper in order to render the bullet holes invisible to the firers

ii When firing at paper landscape targets rifles should be given extra elevation so that the bullets will strike the blank sky screen even if the aim is taken at an object at the bottom of the landscape this necessitates the rifles being harmonized so that they will all shoot to the same height above the point aimed at This is carried out as follows —

Pin or paint aiming marks at intervals of about 12 inches on a horizontal line at the bottom of the blank sky screen (See Plate I page 35)

Draw another horizontal line 27 inches higher this line must be visible from the firing point Adjust the *sights* of all the rifles to 1 400 yards The rifles are then fired with the regulation aim at the aiming marks and *sights* are adjusted until every rifle hits within 1 inch of the line

The distance 27 inches has been chosen because the landscape is 24 inches high and the extra 3 inches allows a margin for low shots

iii A measuring rod 27 inches long is also required When collective fire has been concentrated on any point on the landscape target the rod is held vertically the bottom of it on the point of aim A mark is then made on the blank sky screen at the top of the rod this mark shows where the centre of the group of shot holes should be

* For further details of construction see Sec. 40 11, Volume V, 1931

iv For competitions two concentric wire rectangles 5 in by 4 in and $2\frac{1}{2}$ in by 2 in may be used to determine the score. The centre of the rectangle is placed on the mark with the longest sides of the rectangle vertical every shot in the inner rectangle counts two points every shot in the remainder of the larger rectangle counts one point.

v When fire has been distributed between two points on the landscape a mark is made 27 inches vertically above each as already described these two marks are joined by a line parallel to that along which fire has been distributed.

This line is then produced $1\frac{1}{2}$ inches beyond the marks at either end. A line $1\frac{1}{2}$ inches above and another $1\frac{1}{2}$ inches below are drawn parallel to the first line. The ends of these are joined by vertical lines passing $1\frac{1}{2}$ inches outside the two marks and the parallelogram thus made is again subdivided into equal spaces one for each firer (see Plate I). The extra $1\frac{1}{2}$ inches at each end is to allow for the width of the cone of fire of the two flank men of the section.

vi All shots in the rectangle opposite the particular firer (up to the number of rounds given in the fire control order) count 1 point each to the total score of the section which is firing any shots in any rectangle over and above the number ordered will not count.

Time limits should be imposed in these competitions.

vii A board should be hung in every miniature range showing the elevation required for each rifle as follows —

Specimen Sighting Board

MINIATURE RANGE (25 YARDS RANGE)

No of Rifle	Elevation		Deflection	Elevation for paper landscape targets
	For direct hits	303 represen- tative targets		
1	300	375	Central	1 450
2	300	375	½ division right	1,400
3	350	425	1 " left	1,500
4	250	325	Central	1,250

6 30-yards ranges.—

i 30 yards ranges have the following advantages over miniature ranges —

- (a) The man uses his own service rifle
- (b) He learns to shoot with it under easy conditions
- (c) He becomes accustomed to the shock of discharge, and any tendency to flinch should be eliminated
- (d) He becomes accustomed to the noise of firing
- (e) Rapid fire with service ammunition can be practised

ii These ranges are very useful at all times, especially when classification ranges are distant, and for training recruits and indifferent shots throughout the year

iii *Special safety precautions*—The following special safety precautions will be observed in addition to those referred to in Secs 3, 10 and 11.

- (a) No practice will take place unless an officer or experienced serjeant is present.

- (b) Not more than six rifles or two light automatics or four machine guns are to be fired at the same time on the standard 30 yards range
- (c) In all practices the muzzle of the rifles will be directed towards the target during loading and inspection of arms after firing
- (d) Light automatics will not be cleared by firing the last round. They must be unloaded without firing
- (e) Targets must be placed as follows —

303 inch rifle targets and L A screens will be kept 4 feet clear of the sides of the bullet catcher

Those representing classification targets in the middle of the sand bullet catcher. For grouping practices targets should be placed in sockets as for landscape targets (i.e. 25 yards from muzzle of rifle)

Snapshooting or moving targets in the trench at the bottom of the sand bullet-catcher provided for this purpose

Approved revolver targets at the bottom of the sand bullet-catcher

Landscape targets will be placed on the steps at the end of the ricochet pit so that the sky-screen comes opposite the sand bullet-catcher and the picture directly *below* the bullet-catcher

- (f) When firing anti aircraft practices with 22 inch ammunition targets must be sited so that the line of fire is directed into the bullet-catcher

(g) *The following types of target are not allowed on the 30 yards range —*

Steel plates

Any moving target other than in the trench provided for this purpose

A A targets (except when firing 22 inch ammunition)

iv *Firing revolver* — Practices involving the advance of either the firer or of the target will not be carried out on a 30 yards range

These practices must be carried out on a classification range or on a specially constructed revolver range

v *In conjunction with bayonet assault course* — Bayonet assault courses should be arranged where possible behind the firing point of 30 yards ranges extending from 80 to 100 yards in depth

7. *General instructions for assistants*

c

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given in vol. 1

9 *Notes for instructors on the firing point*

1 Instruction on the firing point is indispensable. Without it expenditure of ammunition may only confirm the firer in his errors while his faults are obscured.

2 The requirements in a good firing point instructor are patience, confidence in his ability to coach, practical experience and a knowledge of the following —

1 The grouping capacity of the weapon

2 The powers and limitations of the weapon and its firer combined

- iii The possible causes of inaccurate shooting
(See Vol I and para 3, below)

In addition he must realize —

- iv The importance of encouragement to young firers
- v The necessity for studying each man's temperament
- vi That a firer's ability to apply his shots to any target depends on his grouping capacity

3 Possible causes of inaccurate shooting— Rifle.—

i It is of the utmost importance that a coach, before attributing any particular fault to a firer should first satisfy himself by careful observation that the fault has actually been made

ii *Causes within the firer's control (see Vol I).* Faults in —

- (a) Aiming
- (b) Trigger pressing
- (c) Position
- (d) Certain faults in the rifle, *e g.* wrong bolt, loose butt or screws
- (e) Nerve control—incorrect breathing.

In addition, certain faults which will only become apparent on the range, such as gun-shyness, excessive keenness, unsteadiness due to unfitness caused by any excess, and lack of determination

iii *Causes outside the firer's control :—*

- (a) A faulty rifle, *e g.* inaccurately sighted, badly fitting or nickelled

- (b) Defective ammunition
- (c) Difficult weather conditions
- (d) An unavoidable cause, such as defective eyesight, or illness on the part of the firer

4 Possible causes of inaccurate shooting—Light automatic —

- i Bad holding
- ii Incorrect use of cover, *e g* , gun not placed on cover near point of balance
- iii Many faults in firing with the rifle are also liable to be made with the light automatic

5 Coaching—General.—

i *Declaration of shots*—The firing point instructor must insist upon each shot (or *burst* with the L A) being truthfully declared the moment it is fired. This applies in grouping practices and in application—slow and snapshooting. Any tendency to make declarations of "Correct" mechanically must be checked from the start and the great importance of truthful declarations must be emphasized repeatedly.

ii *Position of instructor*—The instructor must be in such a position that he can see the action of the firer's trigger finger, his eye, and observe his breathing. The most suitable position is a corresponding one to that adopted by the firer. The instructor must watch the firer and not the target.

iii *Use of Record Books*—Results of all shooting, whether on miniature, 30 yards or open ranges in which instruction on the firing point is given, should be entered by the instructor at the time of firing giving

- (b) Defective ammunition
- (c) Difficult weather conditions
- (d) An unavoidable cause, such as defective eyesight, or illness on the part of the firer

4 Possible causes of inaccurate shooting—Light automatic —

- i Bad holding
- ii Incorrect use of cover, *e g*, gun not placed on cover near point of balance
- iii Many faults in firing with the rifle are also liable to be made with the light automatic

5 Coaching—General.—

- i *Declaration of shots*—The firing point instructor

Correct "mechanically" must be checked from the start and the great importance of truthful declarations must be emphasized repeatedly

- ii *Position of instructor*—The instructor must be in such a position that he can see the action of the firer's trigger finger, his eye, and observe his breathing. The most suitable position is a corresponding one to that adopted by the firer. The instructor must watch the firer and not the target

- iii *Use of Record Books*—Results of all shooting, whether on miniature, 30 yards, or open ranges in which instruction on the firing point is given should be entered by the instructor at the time of firing giving

particulars of elevation, climatic conditions and point of impact of each shot

iv *On miniature and 30 yards ranges* every instructor should have a monocular. After each shot he should note its position and mark it in its correct place in the Record Book. In grouping practices the position of each shot and the order in which the shots are fired should be recorded unseen by the firer.

v *On the open range*—In grouping practices the position of each shot and the order in which the shots strike the target will be ascertained from the markers on arrival at the butts. In application—slow—the position of each shot, as signalled, will be recorded in the Record Book.

When instruction on the firing point is not allowed by regulations, firers should be made responsible for entering up their own Record Books.

Before each practice is fired, previous results entered in the firer's book should be consulted.

6 Coaching—Grouping practices.—

1 *Rifle*—The most favourable opportunity of correcting a firer's faults will be during grouping practices at 100 yards. Each group will be carefully examined since the average size of the groups will be a valuable guide for subsequent coaching during application.

A group will be examined as follows:—

(a) *Size*—When measuring the group, the position of each shot in relation to the firer's declaration will be examined. If a wide shot is found to agree with the firer's declaration, he should, for purposes of future coaching, be considered as

able to group to the standard shown by the remainder of his shots

- (b) *Position of M P I* as regards direction and elevation

Taking into consideration the results of zeroing in the Record Book it will be determined whether any error is attributable to the firer or the rifle

- (c) *Pattern of group* may be an indication of such faults as inaccurate centring varying amount of foresight, flinching (high shots) or pushing shoulder forward (low left shots)

ii *Light automatic*—The instructor must pay special attention to the control of the length of burst and *holding* During practice on the 30 yards range errors in holding will be disclosed by the pattern of groups or 'burst' on target

7 Coaching—In application practices.—

i *Rifle*—The coach should satisfy himself that the rifle has been zeroed and whether any remaining error has been left, and then explain to the firer the area on the target in which it may be expected that all his well fired shots will be included (*see* Sec 1)

During slow practices the instructor should encourage the firer to make his own calculations as to point of aim and elevation, but he will not allow unnecessary alterations to be made So long as the firer maintains his standard of accuracy in accordance with his capacity to group, no alteration in point of aim or elevation should be permitted Unless shots are declared correct and observed correct by the coach no alterations will be made

firing point should be performed taking the time from the detail on the firing point

- iii Field glasses will be carried by all officers and by warrant officers and NCOs equipped with them As many firing point instructors as possible should be provided with these glasses to assist them in coaching
- iv The sights will be used as issued They may not be blackened No additions marking or colouring are permitted nor are orthoptics allowed
- v No aiming or snapping will take place except from the firing point and then only after the red flag has been lowered

Rifle

- vi The detail next to fire will fall in about 10 yards in rear of the firing point All other NCOs and men will ground or pile arms at a distance of not less than 30 yards in rear of the firing point
- vii After firing a shot in a slow practice men will return to the loading position and load at once
- viii If it is necessary to suspend firing all men who are in position will apply their safety catches (or unload if no safety catch is provided) until the order is given to resume the practice

Light automatics

- ix No one except the instructor the superintending officers and the two gun numbers will be within 20 yards of the firing point

During the firing of practices at 25 yards, the superintending officer may make special arrangements to call those waiting to fire up to a position from which they can hear the instruction and criticism, but even then they must be at least 5 yards in rear of the firer.

x No one may be in front of the Lewis gun *magazine post* when the gun is on the firing point

xi Whenever either the butts or firing point danger

xii

xiii A gun must never be stripped to change any part or repair a breakage until the gun is "clear."

xiv In case of a stoppage no one other than the two gun "numbers" will be permitted to touch the gun, except by the permission of the superintending officer

xv If it is necessary to suspend firing the gun will be unloaded without firing

xvi Before a gun is removed from the firing point it will be inspected by an officer to ensure that it is "clear" of ammunition

xvii *Magazines* will be loaded at least 20 yards in rear of the firing point, and no ammunition will be near the gun until the practice is about to begin Empty and partially empty *magazines*

xviii

3 Special safety instructions for anti-aircraft practices.—As certain anti aircraft practices are fired at a range of 10 yards, it is quite possible that the construction of some ranges may cause difficulty in arranging the targets suitably

Before the practices are allowed to be fired on any range the following points will be considered by the responsible authority and special instructions issued to suit the local conditions —

- i When the targets are to be used in the ordinary frames, if the markers' gallery is raised much above the ground level it is probable that the firer's line of fire will be blocked by the bank of the marker's gallery
- ii In other cases it is quite possible that the firer will have an uninterrupted line of fire to the target, but that the bullets may go over the top of the stop butt

On ranges having a danger area greater than the maximum distance a bullet will travel, this would present no objections, but as the extreme

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- iii To overcome these difficulties it may be necessary to build a mound in front of the markers' gallery as a special firing point, so that the line of fire may be brought as near to the horizontal as is necessary to ensure that all bullets are caught by the stop butt

- iv If the above considerations present no difficulty, better value is obtained in the practices if the targets can be placed at an angle of about 45 degrees above the horizontal line of fire
 - v In all cases it is necessary that the distance from the target to the gun be absolutely correct, otherwise the deflection given by the sights will not coincide with the calculated position of the centre of the group
 - vi In *traversing* practices precautions must be taken to ensure that the line of fire when traversing is kept within the width of the danger area of the local range
 - vii When using the A A moving target, the screen should be placed in sockets at the foot of the stop butt immediately in front of the special bullet catcher designed for the purpose
- On certain ranges the bullet catcher may be dispensed with (*see* Vol V)

11. *Regulations for the conduct of the annual course*

1. Regulations affecting rifle firing positions.—

1. *General* —

- (a) A coat or waterproof sheet may be used to protect the uniform
- (b) Except when firing from cover or when rests are authorized, neither rifle, forearm, wrist, nor hand is to rest against any object or to be supported.

- (c) In range practices the regulation positions are obligatory, except in firing from cover, when the rifle should be rested and the position adapted to the ground. This permission includes resting the arm as well, but the cover is not to be specially constructed as a rest for the rifle.
- (d) In firing from behind cover the position adopted must be such as would on service enable the firer to obtain the fullest protection from the cover, having due regard to the efficiency of his fire. In the lying position, the grip of the left hand must be maintained on the rifle, and there must be no undue exposure of the shoulder or legs.

ii *Lying behind cover*—When in this position, the butt of the rifle will be in contact with the ground, and the firer will remain in observation, but otherwise completely covered until the target appears or the command to fire is given.

iii *Lying in the open*—When snapshooting or firing rapid in the open, the rifle may be held in the aiming or loading position as preferred while waiting for the target to appear.

iv *Standing or kneeling behind cover*—In all rapid firing or snapshooting practices in these positions the firer, having loaded under cover, will be in observation during the whole of the practice. Except when the target is exposed, the whole of the rifle (including the bayonet when fixed) will be kept below the cover and the rifle held in a position of readiness as follows —

(a) The right hand grasping the *small of the butt* at the full extent of the right arm the left hand

(b) In snapshooting the rifle will be reloaded, butt in the shoulder before returning to cover. In rapid practices when more than five rounds are to be fired the magazine will be recharged with the rifle held on the top of the cover.

2 Special duties of officers superintending at the firing point —

- i To ensure that the instructions regarding personnel to be coached on the firing point, contained in Appendix I are carried out. When an individual is firing who is not eligible for coaching the instructor will be in rear of the firing point at the place appointed for the detail waiting to fire.
- ii In test or classification practices, each detail should be allowed one or two snaps at the target before loading.
- iii In light automatic practices, to ensure that service bursts of four or five rounds are fired.

3 Grouping practices —

1 *Miniature and 30 yards ranges* — On the miniature and 30 yards ranges the procedure will be the same as detailed for the open range, except that—

(a) *Rifle*

Targets will be examined after one detail has fired

The groups will be measured with wire rings 1 2 and 3 inches in diameter

(b) *Light automatic*

Four or five details may fire before the target is examined

Groups will be measured with wire rings 2 3 and 4 inches in diameter in all cases allowing one shot to be wide

For all practices fired at 25 yards the necessary sighting elevation must be used to ensure that the M P I for a well fired burst will be on the exact point of aim

ii *Open ranges — Rifle and light automatic —*

(a) One firer will be detailed to each target and will fire five shots or a burst maintaining the regulation point of aim throughout Targets will be changed and a second detail will then fire similarly

(b) Both details will then proceed to the targets see their groups measured and note the positions of their mean points of impact with reference to the correct position for the M P I

(c) When for any reason it is found impracticable to send the firers up to the targets after a grouping practice the size and position of each group will be shown in the manner laid down in Sec 12

- (d) On return to the firing point other details will fire but steps will be taken immediately to ascertain the cause of any bad shooting of men in the previous two details (See Sec 6, 7)

4 Application practices —

1 Slow —

(a) *Rifle* — In these practices 20 seconds is the time limit allowed for each shot reckoned from the order to fire. An extra 5 seconds from the completion of the signalling of the last shot may be allowed for altering the sighting elevation.

If there is a tendency to exceed the limit, but not otherwise a whistle should be used to mark the beginning and end of each period.

(b) *Light automatic* — The time limit for application practices is prescribed in the light automatic parts of the various Tables.

2 Timed —

(a) *General* — For every shot fired after the order or signal to cease fire has been given the value of the highest hit obtainable by a single shot will be deducted

point

In all timed practices, the movements of raising and lowering must be carried out with the utmost rapidity.

but without damaging the targets or jarring the target frames

(b) *Snapshooting* —In all snapshooting practices the timed exposures of the target will be controlled by the officer on butt duty. The exposure will be reckoned from the time when the target is in position and stationary to the moment when it is again moved for lowering.

(c) *Rapid* —In rapid practices the time will normally be regulated from the butts as in (a) above. In these cases the actual fire order by the officer superintending at the firing point will be in anticipation of the targets appearing. This officer will inform the officer in the butts when the detail is prepared to begin the practice by means of some simple signal by telephone, or by flag.

Note —In cases where the normal procedure cannot be adopted for any reason, the targets may be fully exposed before the practice starts and the timing of the practice will be carried out at the firing point.

5 General —

i *Charger loading* —Loading in all practices will be by *charger* through the *magazine*.

In rapid practices unless otherwise stated in the special instructions for the conduct of the practice, the rifle will be loaded before the target appears four rounds being in the *magazine*.

ii *Windgauge* —The use of the windgauge is not permitted in practices on the open range.

iii *The fine adjustment* may be used in any practice.

iv *Use of sling* — The sling will not be used for steadying the rifle when firing

v *Sighting shots* — No sighting shots are allowed

vi *Occasional shots* — Occasional shots to verify elevation or strength of wind or to prove the accuracy of the weapon may sometimes be fired by an officer or non-commissioned officer, with the senior officer's permission. They will not be fired during practices of the classification or qualification tests. Notification of their beginning and end will be made to the officer in the butts by telephone signal or bugle sound. The target in use will be lowered and checked and a clean one raised for the occasional shots. When they are completed, it will be lowered and checked, and the original target raised for the firer to complete his rounds

vii *Allowance for jams and missfires, rifle* —

(a) If a jam occurs in a timed practice and is not caused by any fault of the firer the time allowed for the practice will be increased to the extent due to the delay caused thereby. Should, however, a jam in a rapid practice be due to a breakage of mechanism or other defect that cannot readily be rectified on the range, the whole practice will be fired again

(b) In the event of missfires, providing the superintending officer is satisfied that the cap of each cartridge has been struck, extra rounds will be allowed equal to the number of missfires which occur in the practice concerned, a proportionate part of the time allowed for the whole practice being given for each extra round, or rounds.

viii *Allowances for stoppages and missfires, light automatic —*

(a) *Ir*

allowance will be made

- (b) In the case of missfires, providing the superintending officer is satisfied that the cap of each cartridge has been struck, an extra round will be allowed for each missfire

ix *Forfeiture of rounds* — Omission to fire the rounds allotted or failure to fire during an exposure will entail forfeiture of the rounds that should have been fired, and misses will be recorded for them.

x *Annual classification —*

- (a) With the exception of those who are exempted by regulations (*see* Sec 4), and personnel specially referred to in Appendix I, every man will be classified on the day he completes the annual test (*Table A* or *Table B*), or if for any reason he fails to complete these tests, then on the last day of the Weapon Training Year
- (b) Trained men, not exempted by the regulations, who for any reason do not begin *Table A* or *Table B*, will be classified as third class shots. Those who begin the Test or Classification part of any *Table*, but do not complete it, will be classified according to the number of points obtained

- (c) A note will be made in the company and battalion annual returns of the number of men (if any) who are classified without having completed the range practices of Table A or Table B
- (d) In the case of a man transferred to another company in the same unit or to another unit the scores made in classification practices will be counted among those of the company to which he belongs when he is fired
- (e) The best shooting squadron or company and the unit figure of merit will be decided in accordance with the instructions contained in Sec. 28

12 Signalling and scoring

1 Grouping —

- 1 Groups will be measured with wire rings 4 8 and 12 inches in diameter. When the practice is a Test or Classification practice points will be allotted for the various sizes of groups as follows

Rifle —

100 yds	Min or 10 yds range	Score
4 in	1 in	25
8 in	2 in	20
12 in	3 in	15
5 hits 4 within 12 in ring	5 hits, 4 within 3 in ring	10

Light Automatic —

100 yds	30 yds range	Score (30 yds range only)
When grouping is carried out at this range the groups will be measured with the 8 in and 12 in rings in order to let the firer see his capacity to hold, aim and fire accurately so that he may have some guide as to the probable size of his cone of fire when firing accurate bursts at longer ranges	2 in	Four shots within ring, 10 points
	3 in	Four shots within ring, 6 points
	4 in	Four shots within ring, 2 points

ii The size of ring which contains all the shots will be recorded as the measure of the group. A shot mark is included within a ring when it cuts the circumference of the largest circle which can be described within that ring by means of a pencil held at right angles to the target.

iii N " " " " " " " " " "

iv. When for any reason it is found impracticable to send the firers up to the target after a grouping practice, the following signals may be used —

Bull's-eye signal denotes a 4 inch group

Inner " 8 " "

Magpie , 12 " "

Outer , 12 " "

with one wide shot

When the signal has been made after a short pause the centre of the marking disc will be placed on the mean point of impact of the group.

2 For small and large targets —

1 Rifle —

Signal	Methods of Signalling	Value of hit
Bull's eye (<i>see</i> Note below)	White disc placed on the shot hole	Points 4
Inner (inner circle)	Black disc waved twice across the face of the target, and placed with centre on the shot hole *	3
Magpie (magpie circle)	Disc revolved in front of the target and then placed with centre on the shot hole, black side exposed	2
Outer (outer circle)	Black disc moved vertically up and down the left of the target, and then placed with centre on the shot hole	1
Ricochet, miss or remainder of target not within outer circle	Red and white flag shown on the same side as the direction of the miss. If the direction cannot be determined, the flag will be waved across the face of the target	Nil

* *Wagon*

..

..

ii Light automatic —

Normally the number of hits on the scoring surface of the target will be telephoned to the firing point. The M P I for each individual will be shown at the conclusion of each practice by means of a marking disc. In the event of there being no telephone one of the methods laid down in para 7 will be employed.

3 Snapshooting targets —

Rifle —

Hit	}	The target will be raised above the markers gallery and twirled	3 points
Ricochet Miss		Red and white flag shown (as in para 21 above)	Nil

4 Figure targets —

Light automatic —

- i Scoring will be as laid down in the Tables of Appendix I
- ii The normal method of reporting the hits and scores obtained will be by telephone. Where there is no telephone the total score for each individual will be signalled as in para 7 below.

5 L.A. screen target (See Plate 61 Vol V 1931)

This is a screen $12\frac{1}{2}$ feet long and 3 feet high. It is divided into 5 scoring rectangles each 30 inches wide and 36 inches high.

The two scoring rectangles at each end are sub-

divided into half rectangles and at each end the outer half rectangle is to be coloured so that it will harmonize with the colour of the background as much as possible and be indistinct to the firer

Thus the firer will see clearly a screen only 10 feet in length and he must engage this screen by firing a burst at the clearly defined ends and distribute the remaining bursts evenly between these ends

Scoring (applicable to practices of 25 rounds) — Each scoring rectangle containing —

1 shot	2 points
2 shots	4
3 shots	6
4 or more shots	8

H P S 40

6 General —

i In all open range practices other than battle practices targets (except in timed practices when they will be brought to half mast) will only be lowered on a direct order from the officer on butt duty but every shot from the firing point will at once be signalled at the butts as a hit ricochet or miss

ii In *rapid practices* the number of hits of each value will be signalled at the expiration of the time limit after the targets have been checked

iii In *snapshooting practices* the value of hit ' will be signalled after each shot (See para 3 of this section)

iv In *slow practices* when a target is struck the centre of the marking disc will be placed over the shot hole and kept in position sufficiently long to enable the firer to see the position of his shot

v When a shot strikes the target so that the circumference of the mark cuts the outer edge of any ring, rectangle or figure, it is to be counted as hitting within that ring rectangle or figure as the case may be. A *ricochet* usually makes a long ragged hole or mark and will not count as a hit.

vi In the case of screen used for L A practices shots on the dividing lines between rectangles will count in the rectangle more advantageous to the firer.

7 **Alternative methods** — When for any reason, the telephones cannot be used one of the following methods of signalling will be employed —

i *Flags* — Signals between the butts and firing point will be made by means of a flag as follows —

(The signaller whether at the firing point or butts will face the target.)

<i>Preparative</i>	.	Waved above the head
Ready to receive or send down		Held vertically above the head
Tens	Lowered to signaller's right as many times as required
Units	Lowered to signaller's left as many times as required
No hits	Revolved two or three times from right to left
<i>Wash (or patch) out</i>	..	Waved horizontally close to the ground
<i>Practice finished</i>	..	Held upside down
<i>Signal last shot</i>	Held horizontally above the head

ii *Flags and mirrors* — The following code is suggested as suitable for use on ranges where communication between the firing point and butts has to be maintained by means of signals observed in reflecting mirrors or periscopes —

- (a) The signaller provided with a large signalling flag, should take up his position exactly opposite to and facing the mirror. His signals would refer only to the four targets on which the party is firing, numbered from the right when facing the firing point, irrespective of their numbers with reference to other targets on the range
- (b) Signals should be acknowledged from the butts by means of a small signalling flag raised behind the mirror

Nos	Flag signals	Their significance
1	" Preparative," followed by flag waved vertically up and down in front of the body	The practice is about to begin.
2	" Preparative," flag raised to full extent of right arm, and circled from left to right in front of the body	Occasional shots are about to be fired
3	As for No 2, followed by " wash out "	Occasional shots are finished
4	As for No 2, followed by signal for target	Occasional shots are about to be fired on No target
5	As for No 4, followed by " wash out "	Occasional shots are finished on No target.

Nos	Flag signals	Their significance
6	Make the "preparative," and hold the flag vertically above the head to the full extent of the left arm. Then lower it to the left as follows — For No 1 target, once „ No 2 „ twice „ No 3 „ three times „ No 4 „ four times	To call up a target,
7	As for No 6 followed by 'wash out'	Check No target Note — To check all targets, hold the flag horizontally to the right, followed by "wash out". This signal can be repeated if it is necessary to re-examine. The practice is finished
8	"Preparative," followed by flag held upside down, with bunting spread out	
9	As for No 8, followed by flag circled above the head	Practice is concluded for the day.

iii *Bugle* — Where neither telephones nor mirrors are available, bugle sounds must be utilized in accordance with a pre arranged code.

CHAPTER III

THE VICKERS MACHINE GUN

13 *General remarks*

1 The annual machine gun course is divided into five parts —

Part I —Instructional

Part II —Observation instructional and classification

Part III —Controlled fire exercises and demonstrations

Part IV —Battle practices

Part V —Tactical exercises

2 The annual machine gun course will not be fired until the machine gunner has passed the tests of elementary gun drill

The machine gunner will not be considered ' trained ' until he has qualified in the classification practices of Part II (Tables I or II) and taken part in Part III

3 Every officer and every soldier in the machine gun squadron or company will fire each year the practices for which he is allotted ammunition, with the exception that officers and substantive N C O s who have twice classified in Part II * as first class machine gunners or higher, during their current tour of service in the machine gun squadron or company, will not fire Part II

* Tables I or II

again and the ammunition allowed them for that part will be transferred to Part III

In addition every N C O and man in the machine-gun squadron or company will take part in Parts III, IV, and V It is optional for squadron and company commanders to fire the course

Every serving machine gunner who has left the machine gun squadron or company will fire a refresher course yearly (See Sec 1, Appendix II.)

In no circumstances will ammunition other than that allotted to Part II be used for instruction in the practices of that Part

4 If a soldier has fired one or more rounds in any classification practice and is prevented from completing it the points made will not count and the whole practice will be recommenced when his training is resumed

5 If the soldier has fired a ranging practice and is prevented from firing an application or traversing practice which should be preceded by a ranging practice the ranging practice will be repeated when his training is resumed

6 Soldiers who have missed the whole or a portion of the range practices and have become available to commence Parts III, IV, and V with their squadron or company, may, if they have in their last classification reached a qualifying standard be allowed by their commanding officers to be exercised in those Parts, and fire the range practices subsequently

7 Parts I II (Instructional), and III will be carried out in drill order Parts II (Classification), IV, and V in marching order

14 *Special instructions*

1 It is essential that the gun and mounting should be such that a group within the permissible limits is attainable. This will be tested in the presence of the firer in the manner laid down in Sec 43, 4 *

2 A similar test will be made at any time when it is suspected that the standard group is not being obtained.

3 Before Part II is fired the *barrel* will be tested for accuracy as prescribed in Sec 43, 1. If it fails to reach the standard laid down in Sec 43, 2 it will be noted as inaccurate and exchanged. It is unnecessary to carry out the test of the complete gun in this case unless it is found to be inaccurate when fitted with a known good barrel.

4 In the preparation of machine gun ammunition belts for classification practices each firer will load the rounds which he himself will fire. Intervals of not less than 40 empty pockets will be made between the rounds allotted for each practice. When the firer has loaded his belt it will be packed into the belt box, which will then be marked with the firer's name. Before each detail fires the No 1 about to fire will bring up his belt box, take out the belt and lay it out for inspection by the officer in charge of the firing point.

The firer will at the same time have the opportunity of finally inspecting the belt.

5 The officer superintending at the firing point is responsible that guns are unloaded before they are dismounted at the firing point.

* See also Sec 16, 3, testing and adjustment of foresight.

15. *Special range duties and discipline*

1 It is essential that all supervising officers at the firing point are trained machine-gun officers. If sufficient machine gun officers are not available for butt duty a proportion of other officers may be detailed for this duty.

The duties specified in para 4, below, will be carried out by N C Os under such supervision as may be considered necessary.

2 To guard against accidents the following orders will be observed in addition to those given in Sec. 3.

- i No gun will be loaded until the senior officer present has ordered the practice to begin.
- ii Before the red flag is raised at the firing point signifying cessation of fire, and after each detail has finished a practice, the senior officer present will give the order "Clear guns," when the firer will remove the lock from the lock guides and report "Gun clear." The lock will remain in this position until the order "Load" is given.
- iii The officers in charge of the left hand platoon may give the signals to fire and cease fire for the whole line of guns under the orders—by signal or otherwise—of the senior officer conducting the firing, or, at the discretion of the latter, each platoon officer may (subject to the flag which governs the whole firing point) be allowed to carry on independently for the platoon under his supervision.

3 The duties of the officer superintending machine guns at the firing point are —

i During instructional practices—

- (a) To allow no person at the firing point but the officers the instructors, the men actually firing and their Nos 2
- (b) To ensure that the regulations as to target practice and local orders are obeyed
- (c) To detail a N C O to superintend each man's firing and to instruct

ii During classification practices—

- (a) To allow no N C O or man within 20 yards of the gun positions, except the Nos 1 and 2
- (b) To see that the number of rounds allowed for the practice to be fired are not exceeded, and that the belt is "spaced" as described in Sec 14, 4
- (c) Before each practice to allow each firer time to attend to his gun and tripod on the firing point and to examine his ammunition belt.
- (d) In timed practices to enter in the column of remarks on the roll (A F B2050) the number of points to be deducted for any man firing after the signal "Stop" has been given.
- (e) To see that no assistance of any kind is given to any number while he is at the firing point, with the exception of the No 2 carrying out duties at the gun.
- (f) To decide whether extra time shall be allowed in the event of a stoppage or stoppages in the

gun, and in the event of the officer on butt duty notifying him that more hits are on the target than rounds allotted for the practice, to fire the practice again

- (g) To cause the targets to be checked immediately before every practice
- (h) To see that the targets as erected on the butts give reasonable facilities for observing fire, either above below or to one side of them
- (i) To ensure after each practice, by close supervision that all rounds allotted for the previous practice and not fired have been removed from the belt and the number of rounds fired are entered on the roll (A F B 2050)
- (j) Before traversing practices are commenced, to ensure that the firers understand the directions in which they are to traverse the gun at the commencement of the practice, and also that they have an opportunity of testing their clamp.

4 The special duties of an officer on butt duty on a gallery range when machine guns are firing are as follows.—

- i. To see that the area allotted to a gun for ranging practices is marked by an aiming mark, but that no target is erected for the purpose.
- ii. To check the application and traversing targets immediately before firing and to have patched out any hits which may have been made on them as the result of a previous practice.

16 *Instructions for the conduct of the annual course*
(see also Appendix II)

Part I

i Part I consists of practices fired on the 30 yards range designed to give instruction to men in the first year of their training

All the practices of Part I should not be fired on the same day

Instruction should be carried out by —

- i Explaining the practice to each man before he fires
- ii Criticizing the practice whilst in progress stopping fire for the purpose rather than by waiting until the practice is finished before starting to criticize
- iii On conclusion of the practice using the results on the target to emphasize the instructional points
- iv Summarizing the lessons learnt in the practice

2 The instructor at the firing point should watch the firer *not* the target in order that he may see that all points of elementary gun drill are carried out correctly. The shots on the target will bear witness to any faults that the firer may have committed whilst firing. Instructors must realize that the greatest care must be taken to eradicate such faults during the firing of Part I so that the machine gunner shall not carry them with him and acquire faulty actions from the commencement of his training. This applies equally to the actions of

the No 2 at the gun The following are the points to which particular attention must be paid —

i In No 1—

- Correct firing position and holding
- Quick and accurate loading and laying
- Correct pressure on the thumb piece on the signal
- Fire
- Eyes on the target not looking along the sights or down at the thumb piece when firing
- Attention to Points during firing

ii In No 2—

- Inspection of ammunition and belts
- Correct service position (lying or kneeling)
- Attention given to control signals and to feeding the gun (not watching the target)
- Correct and rapid transmission of signals to Fire and Stop

3 If the point of mean impact of a group does not strike the target $\frac{1}{2}$ inch to the right of the point of aim the foresight must be adjusted

4 Practices of Part I may be repeated as considered necessary by the squadron or company commander provided that the total number of rounds allotted to Part I is not exceeded No record of results need be kept but only the total number of rounds expended by the company in Part I

Part Ia

5 Part Ia will be fired by men in their second and subsequent years and as a refresher course for trained

machine gunners who have left the machine-gun squadron or company

6 The details of the practices will be arranged by the squadron or company commander

7 By pooling the ammunition allotted to 2nd and subsequent year men who fire this part the squadron or company commander is able so to arrange the practices that each individual receives instruction in the lessons he most needs

8 As a refresher course for trained machine gunners the practices enable the man to be "refreshed," with a small amount of ammunition in some of the most important subjects which it would be necessary for him to be up to date in if recalled to serve with the machine gun squadron or company.

Part II

9 Part II Tables I and II are divided into two parts—Instructional and Classification

10 —1 The observation and registration practice is fired by both 1st year men and 2nd and subsequent year men. The object of the practice is to exercise men in observation of fire, correction from observation and registration of correct gun range, and also to enable them to appreciate the varying conditions under which observation may be possible. It will be fired on a Battle Dress during the observation

ion under
..veral days

should be allotted for the conduct of the practice. It must be so conducted that all men of each gun detachment are receiving instruction whilst each individual is being exercised.

iii With 1st year men it will be carried out in slow time, each action being carefully criticized.

iv With 2nd and subsequent year men criticism should be given when fire effect is claimed by the firer. Rapidity and economy in ranging should be aimed at.

Some practice using the fixed sight at ranges under 600 yards should be included.

11 The object of the following practices is—

i *Registration* —To allow the firer to register the correct gun range immediately prior to applying fire.

ii *Application* —To practice aiming and maintenance of aim.

iii *Traversing* —To combine application with traversing.

12 In classification practices a strict time limit is imposed.

These form part of his classification as either a—

Marksman machine gunner	} Qualified Machine Gunner
First class machine gunner	
Second class machine gunner	

according to the score he obtains. The firer should have learnt by this time how to handle his gun, and consequently no help or criticism will be given while he is actually firing. He should be left to his own

resources with the object of developing self reliance and confidence in himself and his weapon. Discipline must be enforced at the firing point and as in Part I, all points of elementary training should be carried out correctly. In range work there is a tendency for these to be neglected. Each practice will be explained clearly to each man before he fires.

13 Classification practices should only be fired during the most favourable time of year for individual observation of fire in order that the firer may obtain full advantage from the ranging practices. The results obtainable in the classification practices will mainly depend on the observation obtained in the ranging practices.

On ranges where the nature of the stop-butt is such as to preclude observation of fire by the firer steps must be taken to improve it in order that observation of fire may be obtainable. Dry ashes placed on portions of the stop butt have been found to give good results.

14 One fifth of the total points scored on an open range * will be deducted for each second the firer continues to fire after the signal to stop has been given. No allowance will be made in these practices for stoppages which are due to causes other than defects of the mechanism defective ammunition or breakages when sufficient time to remedy such stoppage will be allowed. The firer will be given time to look over the gun and ammunition belt before each practice is begun.

* Refers to classification practices

Part III

(See Appendix II)

15 The ammunition allotted to Part III will be at the disposal of the machine gun squadron or company commander—

- i To practise fire unit commanders in obtaining fire effect rapidly at effective and long ranges by direct and indirect methods and in making corrections from observation of strike
- ii To exercise the personnel in fire discipline and the maintenance of sustained fire
- iii To give demonstrations (See Chapter V)

16 To give effect to the above Part III will include exercises to give practice and instruction in—

Personnel to practise and receive instruction

- | | | |
|-----|--|-----------------------------------|
| i | Fire control—Direct | All N C Os and potential N C Os |
| ii | Fire control—Indirect
Day and night | } Officers and N C Os |
| iii | Fire discipline—Direct | |
| iv | Fire discipline—In-
direct Day and
night | } Junior N C Os and pri-
vates |
| v | Observation of strike
(including use of
field glasses) | |
| vi | Duties of range-takers
during firing | } Range takers |

- vii Maintenance of sustained fire (stoppages should be included in all belts except for demonstrations) } Troopers and Privates

17 In sub allotting the available ammunition consideration will be given to the following —

- i The machine gun is primarily a direct fire weapon, therefore the bulk of the ammunition will be allotted to direct fire practices, and every fire unit must be exercised
- ii A high average standard of efficiency is to be aimed at and not the training of a few experts, consequently every potential fire unit commander will be exercised and the Nos 1 and 2 frequently changed over
- iii The ammunition available is insufficient for every fire unit to carry out all the methods of indirect fire consequently when one unit is being exercised the remainder should watch and have all the instructional points explained by their instructors
- iv Tracer ammunition, when fired at ranges over about 800 yards shows line only, and more often confuses than assists observations, owing to becoming extinguished before the bullet reaches the ground It is therefore of most value when used in indirect and night firing to indicate correctness or otherwise of line

18 Part III will be fired on a battle practice range
Tactics and cover are not considered

The firing point need not be extensive (100 to 200 yards for each troop or company should suffice), but a wide field of fire with plenty of natural detail at effective and long ranges is desirable.

For indirect fire a crest is required, but should such not exist the methods of indirect fire can be carried out from direct fire positions.

Targets should be selected mainly in areas which are likely to give observation of strike, and should vary in shape and range to bring out the various "Natures of fire."

Part IV

19 Part IV consists of tactical exercises carried out on a battle practice range using ball ammunition. The schemes for these will be prepared by the machine-gun squadron or company commander under the supervision of the unit commander, and will be based on the tactical handling of the troop or platoon within its unit.*

Part V

20 Part V consists of tactical exercises carried out without ball ammunition. The schemes for these will be prepared by the unit or formation commander, and will be based on the tactical handling of the squadron or company within its unit or formation, in co-operation

mander concerned.

with other arms * Every opportunity will be taken to train the brigade machine gun officer in his duties in war

21 Where observation is difficult or impossible, care must be exercised in Parts III and IV to avoid waste of ammunition In such cases a single burst of fire will generally suffice for instructional purposes The practice of repeating bursts when there is no observation must be discouraged

22 Details of the Territorial Army Annual Courses, Parts I, II and III are given in Appendix II

* See footnote on page 78

CHAPTER IV

THE REVOLVER

17 *General remarks*

1 The annual course is designed to practise individuals in delivering fire *instantly by sense of direction*. The quickness with which one or more shots can be fired is more important than the close grouping of the shots.

2 Full value will be obtained from the annual course when a short time is allowed between the instruction and the actual firing of the course. This time should

is fixed and that this alignment is not disturbed by faulty trigger release.

18 *Special range duties and discipline*

1 A revolver must never be brought to a range loaded or be so pointed that if discharged it would endanger the firer or others.

2 The revolver will always be proved (i.e. open and inspected) when drawn from the case or picked up.

3 No weapon is to be loaded except by order of the officer in charge at the firing point

4 The revolver will always be kept in the case except when drawn for a definite purpose

5 Both during and after loading the revolver is to be kept pointing towards the target

6 When out of the case, and not in actual use, the revolver will always be carried at the " Rest position " and not hanging at the side pointing to the ground

7 Before firing begins the officer in charge at the firing point will see that every one, except those firing, is at least 5 yards in rear of the firing point

8 An officer (or N C O) will be responsible for range discipline in rear of the firing point

9 No indiscriminate snapping will be allowed , and snapping at another man's eye will not be practised with dummy cartridges in the revolver When actually in position for firing, firers may be allowed one or two snaps at the target before firing the practice

10 After firing, the officer in charge will give the order " Unload " No one will be allowed to move towards the target until the officer in charge gives an order to that effect

11 Dummy cartridges will never be used in the vicinity of live rounds

19. Instructions for the conduct of the annual course

1. The method of conducting the annual course, targets and scoring will be as shown in Appendix III.

2 Annual classification will be carried out as laid down in Appendix III.

3 Grouping —Each firer will fire the two grouping practices if possible with an interval between them sufficient for faults made when firing the first practice to be corrected by further instruction before firing the second practice. These groups will be fired by *single action* using the sights so that the individual capacity of each firer to release his trigger and to hold the revolver correctly may be ascertained before passing on to shooting only by sense of direction.

4 Missfires and jams —Provided that the cap has been struck any round which missfires will be tested at once in another revolver and will only be treated as a missfire if it fails to go off in this test in which case another round will be allowed with proportionate time allowance in respect of each missfire. No allowance will be made in case of a jam occurring whatever the cause.

5 Forfeitures of rounds —Omission to fire the rounds allotted or failure to fire during an exposure will entail forfeiture of the rounds that should have been fired and misses will be recorded for them.

20 *Mounted practices*

1 Preliminary instruction —In addition to the training contained in Vol I those about to fire *mounted practices* will be given further instruction in handling the weapon as follows —

- 1 *Dismounted* —The class will be formed in single rank at one pace interval and instructed in the methods of drawing carrying and firing in different directions

u *Mounted —*

- (a) As for 1 above
- (b) With blank ammunition

In order to get horses accustomed to the report of the revolver and the appearance of targets certain of the mounted practices should be rehearsed by each firer first with an empty revolver and later with blank ammunition

This can be carried out in the riding school or training area making use of 'Figure targets No 2' or if not available riding school dummies. Strict attention will be paid to the inspection of revolvers before and after these practices, also the safety precautions enumerated in Chap VI Vol I, 1931

2 Method.—On the command 'Raise—Revolvers' the weapons will be drawn and raised the revolver hand level with and close to the outside part of the shoulder, elbow touching the side of the body, *barrel* vertical, forefinger outside the *trigger guard* (See Plate II, p 84)

On the order 'Fire,' the revolver will be brought down to the mark arm fully extended, the forefinger placed on the *trigger* and the *trigger* pressed, as the *barrel* interrupts the line of sight

3. Instructions for conduct of practices.—

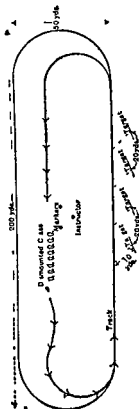
- 1 *Firing*—The method of firing these practices will be the same as in Part II, except that *Double* action only will be employed
- u The squad will be formed as shown in the diagram (Plate III, page 85) dismounted Each practice

PLATE II.



"RAISE REVOLVERS" (MOUNTED)

PLATE III



The positions of targets are for firing to the right front.

For practices fired to the left front movement will be in the opposite direction to that shown above.

- iii. Ammunition allotted for battle practices will not normally be used for any other purpose, except when a classification range only is available in which case some of the ammunition may be usefully expended in firing section practices on landscape targets with harmonized sights (See Sec 8, 4 and 5)
- iv The number of rounds fired by an individual in one day should not exceed 30 and a proportionate amount when using the light automatic or machine gun
- v In all practices, 5 rounds, additional to the number allowed for the exercise, should be issued to ensure that men keep their magazines filled and to accustom them to safeguard their ammunition in battle

3 Practices must be based on the training manuals. Owing however, to the long range of the modern bullet, few areas exist in thickly populated countries where *direct* and *enfilade* fire can be employed *simultaneously*. Commanders must, therefore, exercise supervision during collective practices and ensure —

1 That due precautions for safety are taken.

11 That the angle at which fire is delivered is carefully controlled.

Owing to these restrictions, it will seldom be possible at home stations to carry out exercises on a larger scale than the platoon. Unless freedom of action as to fire and movement after the opening situation can be given to leaders exercises should take the form of *demonstrations* by platoons or, occasionally, by companies

4 Preliminary arrangements —Officers responsible for framing practices should —

- i Visit the battle practice range
- ii Ascertain nature of ground and targets available
- iii Draw up suitable practices having regard to ammunition available
- iv Arrange for the siting and exposure of targets as required also for checking them and communicating results In doing this the position of the targets with regard to the sun must be considered
- v Put out the targets When target exposures have to be made by markers such exposures must be rehearsed before the practice begins

5 Conduct of practices —The value of these exercises will depend to a great extent on the ability of the officer conducting the practice to explain the situation in a realistic manner These officers will —

- i Ensure that the initial occupation of the position as well as the conditions that obtain during the development of the action are all such as would be feasible in war
- ii Detail individuals or units for practices and where necessary arrange that they are kept under cover while waiting their turn to fire
- iii Detail N C Os to watch and criticize individuals or fire units as necessary They must also watch to see that the direction of the fire is within safety limits—otherwise they will not interfere with or assist the firers They will conform to the movements of the individuals or sections

6 On conclusion of the practice —

- i The target or targets will be checked and hits recorded In the case of a fire unit this should be expressed as follows —

- | | |
|-----------------------|---------------------------------------|
| (a) Concentrated fire | percentage of hits to rounds fired |
| (b) Distributed fire | percentage of loss inflicted on enemy |

- ii The practice will then be discussed on the following lines —

(a) The individual or fire unit commander states the *information* and orders he received his action and reasons

(b) The N C O watching the practice states his views

(c) The officer in summing up after stating the factors affecting the situation and the alternatives should give his opinion as to the correct action to be taken in the particular case with the reasons ending by bringing out the chief lesson or lessons to be learnt from the exercise

7 Company commanders will keep records of all practices carried out

8 In view of the importance of executing battle practices at unknown ranges general officers commanding in-chief will when classification ranges only are available endeavour to hire suitable ground for these exercises under the Regulations for Engineer Services and Volume V of this manual

9 Whenever available ranges or areas without firing points should be used, but if it is absolutely necessary to use classification ranges, practices should be performed on a flank if the extent of the danger area will admit. On the classification range the landscape should, if possible, be broken up by means of screens, brushwood or other contrivances so as to conceal the firing points and so introduce uncertainty as to distances.

10 Falling plates and collapsible targets are of great value in all battle practices, particularly in competitive practices.

11 Targets should conform in size, shape and colour to those likely to be met in battle. They should be disposed in formations resembling those likely to be used by the enemy. Markers should be trained by rehearsal to handle these targets in a realistic manner.

12 Targets and appliances suitable for battle practice ranges are shown and explained in Volume V.

13 Battle practices should take place throughout the year.

14 Dress for battle practices will be marching order.

15 Bayonets will be fixed in all practices under 300 yards.

16 For special instructions regarding machine gun battle practices, *see* Sec. 16.

23. Programmes

1. The general programme of battle practices, other than machine gun, to be carried out throughout the year should be arranged by brigade and unit com-

manders as under and the available ammunition should be allotted in proportion to i, ii and iii below, and in accordance with existing range and other facilities —

- i Individual battle practices
- ii Section battle practices
- iii Platoon and other battle practices
- iv Combined exercises with ball ammunition, *i.e.*, co-operation with other weapons (*See* Sec 26)

2 Machine gun battle practices form part of the annual machine gun course and will be carried out in accordance with instructions contained in Chapter III

24. *Individual battle practices (rifle and light automatic)*
(*See also* Sec 8, 4 and 5)

1 While the object of all individual battle practices is to exercise men in fire discipline judging distance, fire control and observation they should be designed to bring out, in addition, some of the following lessons —

- i Use of ground and cover
- ii Fire and movement
- iii Selection of target and regulating rate of fire
- iv Alternate use of the bullet and bayonet, *i.e.*, close combat training
- v Firing at moving targets
- vi Sniping bringing out the qualities of patience, vigilance, alertness
- vii Mutual assistance by observation, when working in pairs
- viii. Anti gas defensive measures

2 The distances should not exceed 600 yards, except in countries where it is considered by the General Staff

concerned that practice at longer ranges is advisable. Most of the available ammunition at home should be expended at distances between from 400 yards down to 50 yards, or less

3 In order that interest may be maintained each firer will be provided with a separate target and a record will be made of his hits

4 Whilst the practices are actually being carried out there should be no fire control or interference on the part of leaders except such as may be required in the interests of safety. Men should learn by their own mistakes and the mistakes of others

5 The following examples are published merely as a guide to assist those responsible for the framing and conduct of individual battle practices in units. It is not intended that the conditions therein should necessarily be followed in detail

EXAMPLES OF INDIVIDUAL BATTLE PRACTICES

(Issued as a guide only)

Rifle

No 1.—Individual practice.

Name —" Firing in pairs "

No of rounds —5 for each man.

Targets —Collapsible . iron falling plates, tiles or bricks ;
5 for each firer.

Range.—Between 300 and 200 yards. Fire position to be off the normal firing point, if possible.

Lessons—

- i Mutual assistance
- ii Observation of fire and the methods adopted by observer for indicating the strike of the bullets

Method of conducting—

- i No time limit
- ii Men of section work in pairs, close together
- iii One firer fires his 5 rounds in succession, comrade observes for him and *vice versa*
- iv Hits obtained by each individual will be noted

Points for criticism—

- i Points of elementary training
- ii. Determining point of aim
- iii Observation of fire, information to be exact, not vague
- iv Mutual assistance

Marker's notes —Targets placed in any convenient position where the firers can observe the strike of the bullet Targets to be at least one yard apart.

No 2 —Individual practice.

Name —" Assault practice "

No of rounds —5 for each man.

Targets —Figure No 2 or 3, one to each firer. Dummy sacks, three to each firer.

Range —200 yards to 50 yards

25. Section and platoon battle practices (rifle and light automatic) (See also Sec 8, 4 and 5)

1 Section and platoon battle practices are intended to afford practice in their duties to platoon commanders and fire unit commanders, and to exercise the men in their duties within the section. As in the case of individual practices certain lessons are common to all. In addition, lessons based on the following should be brought out —

- i Action of the sections within the compass of the platoon in attack, defence and retirement
- ii Use of ground and cover, selection and occupation of suitable fire positions
- iii. Fire and movement—
 - (a) As between sections within the platoon
 - (b) Within the section
 - (c) Movement by sections to take instant advantage of any opportunities created by machine guns, tanks, artillery, smoke or by other sections or platoons
- iv Close combat fighting—control to be maintained as long as possible—quick re forming for further advance or meeting a counter attack
- v Rapid opening and correct application of fire to meet emergencies, such as an immediate counter attack
- vi. Action in a gas attack
- vii. Ammunition supply

2 As far as ammunition permits, company commanders should ensure that every fire unit commander and understudy is exercised in the direction and control

of his fire unit and that every man is practiced in applying fire (rifle and light automatic) under the control of a leader on varying ground both in attack and defence

3 Distances at which practices take place should vary from 800 yards at the furthest down to 50 yards or less

4 In platoon battle practices with inexperienced leaders and men greater value for the ammunition expended will often be obtained if a rehearsal takes place before the practice is actually carried out with ball ammunition

EXAMPLES OF SECTION BATTLE PRACTICES

(Issued as a guide only)

Rifle

No 1—Section practice (with or without anti gas respirators)

Name — Superiority of fire '

No of rounds —10 to each man

Targets —Figure No 3 One to each firer, according to the strength of the section

Range —Unknown

Lessons—

- i Rapidity and accuracy of fire.
- ii Mutual support
- iii Rapid change of point of aim

Method of conducting—

- i The section will be extended in position, rifles loaded *sights* adjusted, fire to be opened when targets appear

- ii Fire will cease—
 - (a) Should the number of targets up exceed the number of firers
 - (b) If all targets are down
 - (c) One minute after the first appearance of the targets
- iii The time in which all targets are hit or the number of targets left up at the end of a minute should be noted

Points for criticism—

- i Quickness in opening fire
- ii Accuracy of fire
- iii Mutual support

Marker's notes—

- 1 Careful control of the targets is necessary
- 2 On the signal to Commence being given the number of targets ordered will be raised about three paces apart Ten seconds later two more targets will be raised and a further two every ten seconds up to 50 seconds
- 3 Targets will be lowered when hit
- 4 If at any time all targets up have been hit no more will be put up
- 5 The targets should be so arranged that one of the markers can see when the target (not the stick) is hit

No 2—Two sections

Name — Mutual support " (Attack by two sections)

No of rounds —15 to each man



Marker's notes—Two screens as far apart as possible placed in a general line on a convenient position
The number of hits to be recorded

Light automatic

No 1—Section practice in attack

Object—To practise the section in advancing by bounds and occupying successive fire positions

Ammunition—60 rounds

Targets—Two pairs of iron falling plates representing two hostile machine guns

Method of conducting—An imaginary situation of a platoon during an attack to be given which would give the section carrying out the exercise the task of advancing and engaging the two hostile machine guns

The targets should be so placed that one has to be knocked out before the section can advance to a fire position from which it would be possible to engage the other

The section starts the practice about 700 yards from the target position. After advancing about 200 yards it occupies a fire position and engages the first target

When the plates representing the first machine gun are hit (or half the number of rounds allowed for the practice have been expended) the section advances about 150 yards to another fire position where it comes into action against the second target

Main points for discussion on conclusion of the practice —

- Fire effect
- Suitability of fire positions selected
- Quickness of getting into action
- Fire orders
- Observation of fire
- Replenishment of ammunition supply to gun
- Use made of the ground both whilst advancing and in position
- Formations adopted during movement

No 2 —Section practice in defence

*Nature of practice —*Light automatic in defence

*Ammunition —*60 rounds for gun

*Targets —*Groups of disappearing figures

*Method of conducting —*The section will occupy a position dug in if possible

The officer conducting will define the limits of the sector the section is to cover

Small groups of targets will be raised and lowered from pits at unknown distances mainly between 300 and 600 yards from the section position. The exposures should be irregular

Main points for discussion on conclusion of practice —

- Fire effect
- Elevation used
- Choice of targets
- Fire control orders
- Disposition of section
- Method of ammunition supply

26. Combined exercises with ball ammunition

1 Combined exercises, using ball ammunition, may be designed to practise and illustrate the correct co-operation of all arms in battle *see* Infantry Training

Such exercises must necessarily be of great training value, and G Os C -in C will make every effort to afford opportunity for such training

2 In commands where the limitations of range accommodation prevent such training, officers and non-commissioned officers of infantry and cavalry should, as far as possible be afforded opportunities of witnessing the action of other arms and their methods of co-operation in battle, *e g* tanks, artillery, aircraft

CHAPTER VI

MISCELLANEOUS

27 *Weapon training competitions*

1 All commanders must recognize the importance of the competitive element as an incentive and direct aid towards weapon training efficiency

2 Weapon training meetings and all competitions towards which assistance is given directly or indirectly from public funds will be conducted in accordance with the spirit and training methods contained in this manual

The aim of such competitions should be to develop the system of weapon training on the right lines and to induce practice in methods which will lead to increased efficiency on the battlefield

3 As a general rule conditions of competitions should be framed to induce relatively large numbers of officers NCOs and men to compete rather than to bring out a few selected champions Team competitions are of paramount importance The attainment of a good average standard of proficiency in weapon training by a large number of men is infinitely more valuable than phenomenal skill developed by a few specially trained experts Championships lend interest to a meeting but do not directly assist the object in view

4 The conditions of any competition should be suited to the rank and experience of the competitors In

individual competitions, competitors should be divided into classes. Thus, for example, competitors may be conveniently divided into classes as follows —

- i Officers and senior N C Os
- ii Serjeants and corporals
- iii Soldiers, including lance corporals
- iv Young soldiers (say, under 18 months' service)

or

- v Marksmen and first class shots.
- vi Second class shots
- vii Recruits

5 Even in competitions of an individual nature, the element of "playing for the side" or "for the regiment," may be introduced with advantage. By thus appealing to the *esprit de corps* of the competitors, a further incentive to effort will be produced. For example, in a competition involving an aggregate at several ranges, regiments and battalions might be brought into competition by each being allowed to count the scores of the first 10 or 20 of their members taking part in the competition. In this way large numbers of men would be competing for the honour of their respective regiments.

6 The conditions as regards numbers for all team competitions should be based on the existing organization of cavalry, infantry, engineers and other services and the actual strength of units. It is important to guard against the "packing" of teams.

7. Programmes should, as far as possible, embrace all weapons, and conditions should include all the elements of weapon training. Programmes should be published

early in the season, so that time may be given for practice and elimination

8 The conditions under which command divisional, brigade or unit meetings are held render the correct application of tactical methods extremely difficult. nevertheless every effort should be made to ensure that all movements and occupation of fire positions conform as far as possible to service conditions

9 In competitions of a service nature competitors should be allowed to fire only with a weapon on charge of their unit. No departure from the regulations governing such considerations as the painting of sights, sighting shots, use of slings provision of wind flags, targets high power telescopes rifle accessories etc., is to be permitted in weapon training competitions

10 Prizes The system of distribution should be to have as many as possible, rather than a few large individual prizes

28. Computation of figure of merit

1 Best shooting squadron or company.—

i The best shooting squadron or company in a regiment or battalion of the Regular Army will be that whose trained soldiers obtain the highest figure of merit.

ii The method of calculating the figure of merit will be as follows —

Every marksman with the rifle scores 4 points.

Every 1st Class shot with rifle scores 3 points

Every 2nd Class shot with rifle scores 2 points

Every 3rd Class (including "not fully exercised")
0 points

Every marksman L A gunner with the L A scores 4 points

Every 1st Class L A gunner with the L A scores 3 points

Every 2nd Class L A gunner with the L A scores 2 points

Every 3rd Class (including 'not fully exercised') scores 0 points

Thus a man who classifies as a marksman with both the rifle and L A will obtain the maximum score of 8 points

Partial exemptions who retain their classification will score as marksmen* those who fail to do so will score according to their final classification

The figure of merit is the percentage of points scored to the maximum points obtainable

The maximum points obtainable will be the number of all ranks who should classify with the rifle plus the number of all ranks who should classify with the L A , multiplied by 4

iii 3rd Class shots or 3rd Class L A gunners will only count on their final classification as such : e after such repetition as may be authorized by regulations

iv The same system will be applicable to the Territorial Army except that, as there is no classification of ' Marksman,' the maximum points obtainable will be the number of all ranks who should classify with the rifle plus the number of all ranks who should classify with the L A multiplied by 3

* This does not refer to machine gunners and H Q L.A. gunners, see Sec 3, 2, iii, (d) and (f), Appendix I

Every 1st Class shot with rifle scores 3 points

Every 2nd Class shot with rifle scores 2 points

Every 3rd Class (including not fully exercised")
scores 0 points

Every 1st Class L. A. gunner scores 3 points

Every 2nd Class L. A. gunner scores 2 points

Every 3rd Class (including not fully exercised")
scores 0 points

v The figure of merit of a regiment or battalion is the percentage of points scored to the maximum points obtainable by that regiment or battalion, calculated as in paras ii iii and iv above

2. Best judging distance squadron or company.—

i At the end of the year individuals will be graded as follows —

1st Class judge of distance Passed in 3 tests

2nd Class judge of distance Passed in 2 tests

3rd Class judge of distance Passed in 1 or less of the tests

ii Men who have not been fully tested must be classified as 2nd or 3rd Class according to the number of tests passed. No allowance will be made for tests which have been omitted. An individual who, though not exempted, does not attend any test will be graded as 3rd Class.

iii The squadron or company figure of merit for judging distance will be the percentage of 3rd Class of the total number of all ranks in the squadron or company who should have been tested *

* Recruits who join battalions within six weeks of the end of the Weapon Training Year will not be included when working out the figure of merit

iv The figure of merit of a regiment or battalion will be the percentage of 3rd Class of the total number of all ranks who should have been tested

v Exemptions from judging distance tests will be the same as the total exemptions from annual range courses

29 Badges—Regular Army*

Rifle and light automatic—

1 Badge for the best combined rifle and light automatic shot amongst N C Os and men in each squadron or company of the Regular Army—Star and crossed rifles—Issuable annually Casuals and men attached from other companies are not eligible The best shot in each squadron or company will be decided under the conditions laid down in Appendix I Sec 9

2 Badge for the best combined rifle and light automatic shot amongst serjeants and lance-serjeants in a regiment or battalion of the Regular Army—Crown and crossed rifles in wreath—Issuable annually and awarded to the serjeant or lance serjeant who obtains the highest combined score as laid down in Appendix I

3. Badge for the best combined rifle and light

automatic shot amongst corporals and privates in a regiment or battalion of the Regular Army—Star and crossed rifles in wreath —Issuable annually and awarded to the corporal or private who obtains the highest combined score as laid down in Appendix I

4 Squadron serjeant-major, squadron quarter-master serjeant troop serjeant and section commanders of the best shooting cavalry squadrons, or company serjeant major, company quarter-master serjeant platoon serjeants and section commanders of the best shooting infantry companies of the Regular Army—Crown and crossed rifles.—Issuable annually

5 Badge for good shooting with rifle, Regular Army Rifle marksman—Crossed rifles —Issuable to soldiers below the rank of warrant officer Class I of the cavalry engineers and infantry of the Regular Army who qualify as rifle marksmen in Table B

6 Badge for good shooting with light automatic, Regular Army—Light automatic marksman—' L G ' in wreath —Issuable to all soldiers below the rank of warrant officer in the cavalry and infantry and to anti aircraft light automatic gunners in other arms of the Regular Army who qualify as light automatic marksmen in Table B

7 Trained men on the establishment of depots may wear during their tour of duty the individual good shooting badges which they won when they last fired with their units provided that they have qualified in the annual course prescribed for them whilst at the depot

8 A soldier transferred to the machine gun company or to the H Q Wing as an A A L A gunner, who was a rifle marksman in his previous weapon training year, provided he retains his classification in the prescribed course may continue to wear the badge

Machine gun

9 Badge for the best machine gunner in Part II of the annual machine-gun course, among the lance-corporals and troopers or privates of a machine-gun squadron or company—Star and M G. in wreath—Issued annually and awarded to the lance corporal trooper or private who obtains the highest aggregate in the above

10 Badge for marksman's aggregate with machine gun. Machine-gun marksman—"M.G." in wreath.—Issuable to soldiers in the machine gun squadrons of cavalry and machine-gun companies of infantry who qualify as marksmen in Part II of the annual machine gun course

11 Badge for Range-takers—"R" in wreath.—Issuable to corporals, lance corporals, troopers and privates in the machine gun squadrons of cavalry and machine gun companies of infantry who qualify as 1st class range takers in the annual range taking test

A N C O or man to whom the badge has been issued and who fails to re qualify, or is not tested, will forfeit the badge

General

12 Badges will be worn as laid down in the Clothing Regulations

Chap. VI, Secs. 29 and 30]

13 The names of all those entitled to these badges will be published in regimental lists.

14 Badges for good shooting will be issued as possible after they have been won.

15 Where a marksman in either rifle or light automatic is also entitled to a "company best shot" badge the highest badge only will be issued.

30. Badges—Territorial Army.

1 The following special badges will be issued to warrant and non-commissioned officers and soldiers of the Territorial Army:—

Rifle and light automatic

i 1st Class rifle shots:—

Single rifle—Issuable to soldiers below the rank of warrant officer of the Yeomanry Scouts and Infantry who qualify as 1st Class shots in the annual classification practices.

ii 1st Class light automatic gunners:—

L.G. (without wreath)—Issuable to soldiers who qualify as 1st Class light automatic gunners in the annual light automatic classification practices.

iii Best rifle shot in each squadron or company:—

Single rifle and star—Issuable to the N.C.O. or man in each squadron or company who obtains the highest percentage of points in the annual rifle classification practices.

iv. Best rifle shot in regiment or battalion:—

Single rifle and crown in wreath.—Issuable to the

N C O or man in each regiment or battalion, who obtains the highest percentage of points in the annual rifle classification practices

v. Best light automatic shot in each squadron or company :—

" *L G* " and *star* —Issuable to the N C O or man in each squadron or company who obtains the highest percentage of points in the annual light automatic classification practices.

vi Best light automatic shot in regiment or battalion :—

" *L G* " and *Crown* —Issuable to the N C O or man in each regiment or battalion who obtains the highest percentage of points in the annual light automatic classification practices.

Machine gun

vii Badge for the best machine gunner among the lance-corporals and troopers or privates of a machine-gun squadron of yeomanry or machine-gun company of infantry—Star and M.G. (without wreath).—Issued annually and awarded to the lance-corporal, trooper or private who obtains the highest percentage of points in Part II of the annual machine-gun course

viii Badge for 1st Class machine gunner—" M G. " (without wreath).—Issuable to soldiers who qualify as 1st Class machine gunner in Part II of the annual machine-gun course

ix. The method of deciding ties will be laid down by the commanding officer

General

2 Badges—how worn —The single rifle musketry badge will be worn on the left forearm at an angle of 45 degrees with the muzzle of the rifle pointing upward and inward. Other skill at arms badges will be of similar design and including the light automatic and machine gun badges referred to above will be worn in a manner corresponding to that of similar badges for the regular forces.

3 The names of all those entitled to good shooting badges will be published in regimental orders.

4 Badges for good shooting will be issued as soon as possible after they have been won.

5 Where a 1st Class shot in either rifle or light automatic is also entitled to a 'company shot' or 'battalion shot' badge, the highest badge only will be worn.

31. *Prizes, details of awards*

1. The grants allowed by the Royal Warrant for Pay, etc., for issue as weapon training prizes to NON-EUROPEAN units of ENGINEERS and INFANTRY in which Proficiency Pay is not admissible will be awarded as follows —

- i. Grant (a) will be drawn for all recruits (except officers) who complete Table "A" and will be awarded to the best shots of each party as the commanding officer may deem desirable.
- ii. Grant (b) will be drawn for all ranks (except officers and warrant officers) who have completed the classification or qualification practices prescribed.

for trained soldiers It will be awarded in accordance with a scheme which will be prepared by the commanding officer at the commencement of the Weapon Training Year, and submitted for the approval of the general officer commanding

- iii All those in respect of whom money is drawn will be eligible to receive prizes but serjeants should compete separately, and not with the rank and file
- iv As soon as a company has completed the classification practice Army Form O 1716 will be prepared, in triplicate and forwarded for the approval of the general officer commanding When approved two copies will be returned to the unit, one for retention and the other for transmission with the pay list in which the prizes are charged against the public
- v. Similar procedure will be followed in regard to parties of recruits

2 The awards will be notified in orders

3 In regard to the forfeiture of prizes, *see* Royal Warrant for Pay, etc

4 The general officer commanding is authorized to decide in respect to the issue of prizes in cases in which he may consider their issue unmerited

32. Returns —General remarks

1 The following returns are to be used for recording weapon training performances Records and diaries of

collective battle practices and Army Book 99 will be retained until out of date. The Regimental Company and Recruits Annual Returns and records of all tests should be retained for three years. general officers commanding may authorize the destruction of all others, including Army Form B 186 after the conclusion of the Weapon Training Year.

33 Returns —Regular Army

1 Recruits weapon training —

i Army Form B 188 For use by units whose recruits fire the Empire Test and Table A Parts I II, III and IV

ii Army Form B 188A For use by units whose recruits fire Table A Parts V VI and VII

Full instructions as to compilation and completion are contained on page 1 of these forms

2 Squadron, battery or company annual returns —

i Army Form B 192 For use by regular units of the Household Cavalry Cavalry of the Line Brigade of Guards and Infantry of the Line whose personnel fire Table B and Revolver Course

ii Army Form B 192A For use by regular units of the R A, R E R Signals R A S C, R A M C, R A O C, R A V C and A E C whose personnel fire portions of Tables A B and Revolver Course

3 How compiled —

Full instructions as to compilation and completion are contained on page 1 of these forms

4 Transfers.—

1 The performances of men who are transferred from one squadron, battery or company to another in the same unit or to another unit after completion of classification practices will be retained for record in the return of the squadron, battery or company by which they were exercised, those men who have not completed classification practices will be ruled out of the return of the squadron battery or company giving, and entered in that of the squadron battery or company receiving the transfer

11 The performances of casuals of the squadron, battery or company and of men not fully exercised, transferred to the squadron battery or company, will be entered as soon as transfer returns are received.

5 Corrections from firing point registers and butt memos.—

1 When the register is kept at the firing point on non gallery ranges and a memorandum at the butts, the necessary additions and deductions will be made *before the company average is struck*

11 With the exception of those who are exempted by regulations (Sec 4, 5) and personnel specially referred to in Appendix I, every man will be classified on the day he completes the annual test, Tables 'A' or 'B'; or if for any reason he fails to complete these tests, then on the last day of the Weapon Training Year.

6 Regimental annual return.—

Army Form B 187. For use by all units of the Regular Army.

7 Compilation, when and to whom rendered —

i This return will be prepared from the Recruit and Company Returns (Army Forms B 188 or B 188A B 192 or B 192A)

ii It will be sent in duplicate through the usual channels within 28 days of the conclusion of the weapon training year to the general officer commanding in chief, who will enter his remarks return one to the unit and retain one

iii When a unit is removed from one command to another at home after completion of its annual course of weapon training (that is excluding casualties or small parties) the return will be submitted to the brigade and divisional commanders and the general officer commanding in chief under whom the course was carried out

iv The commanding officer will note in this return full particulars of any variation in the course sanctioned under Appendix I

v Detachments (and units not quartered in a station with other units of their corps) of the R A, R E, R A S C and R A O C, will render returns on Army Form B 187 When several batteries or companies are stationed together, one return may be rendered for a brigade or for such groups as the general officers commanding in chief may direct

vi Instructions as to compilation are contained on page 1 of the form

8 Brigade commander's remarks.—Brigade commanders will submit, on these returns, reports on the

training of individual units, based on inspection and on the results of firing conducted under classification and battle practice conditions. The following points should be specially referred to —

- i. The individual efficiency of the men as shown by their firing and independent action during the classification practices and individual battle practices
- ii. The proficiency of officers and non commissioned officers in judging distance, as well as their instructional capacity. Their general weapon training efficiency will be judged by the conduct and results of collective battle practices, fired under conditions approximating to those of active service
- iii. The ability of the officers to give weapon training its full tactical significance, as indicated by their methods of instruction, lectures, and practical demonstrations of fire power.

9. Annual report by G.Os C.-in-C.—

i. At home stations general officers commanding in-chief will render to the Assistant Commandants, Small Arms School, Hythe and Netheravon for submission to the Army Council, by the 31st December each year, separate reports, in narrative form, on the small arms weapon training of the units of the Regular Army, Militia and Territorial Army in their commands

- ii. In these reports they will draw special attention

to any circumstances which have debarred units from compliance with the regulations for effective weapon training. Recommendations regarding matters which cannot be decided locally will be made on a separate sheet at the end of the report on each branch of the service.

11 Reports and returns from stations abroad will be submitted as soon as possible after the conclusion of the Weapon Training Year.

10 Reports on British Units, etc., in India.—The Commander in Chief in India will forward a narrative report on the small arms weapon training of these units at the end of the Weapon Training Year for the information of the Army Council.

34. Returns—Territorial Army

1. Squadron, battery or company annual weapon training return. Army Form L 552 —

1. This form will be used for recruits and trained soldiers.

11 Special instructions for compiling the return are printed on the form.

2 Regimental weapon training return—Army Form L 569 —

1 This return is compiled from the Company Annual Returns, Army Form L 552.

11 It will be rendered in duplicate, through the usual channels within one month of the conclusion of the

Weapon Training Year to the general officer commanding in chief of the command, who will enter his remarks, if considered necessary, return one copy to the unit and retain one

iii Detachments (and units not quartered in a station with other units of their corps) of units other than yeomanry scouts and infantry, will render returns on Army Form L 569

Where several units such as batteries of artillery or companies of R F are stationed together one return may be rendered for a brigade or for such groups of units as the general officer commanding in chief may direct

iv Army Form E 570 (Annual Machine Gun Count) will be rendered in the same manner as Army Form E 552 and one copy will be forwarded to the Assistant Commandant Netheravon Wing, Small Arms School (See sub para. i above)

35 Record of ammunition expended (all arms)

1 A record for each day firing takes place will be kept by each company commander and weapon training instructor in the Regular Army, Militia and Territorial Army of all ammunition expended under the various headings and the ammunition account in the company annual return will be compiled from it

2 These records will be called for and examined by accountants from time to time and will also be inspected by commanding officers when striking off ammunition as expended

3 These records will be kept in Army Book 99, which will be retained until out of date

36 *Record of battle practices*

A complete record (in manuscript or type) of all battle practices fired will be kept with the registers by company commanders and will be inspected periodically by commanding officers. These records should be kept for three years and should be studied when framing practices for the current year.

37 *Transfer return (all arms)*

1 **Weapon training transfer return** Army Form B 193 —

i This form will be used in all cases of transfer and to transmit the performances of casuals and of recruits to their company commanders. The registers recording the performance of a casual will be retained in the company exercising him.

ii In the case of men who have not begun the annual course at the date of transfer the words recruit (or trained soldier) not exercised will be inserted in the column for remarks.

iii In all other cases the return will show fully the practices performed and scores obtained in classification or qualifying practices.

iv In the case of the transfer of a trained soldier any further information regarding the soldier's weapon training capabilities that will assist his new company commander will be inserted in the remarks column e.g. the category in Tables A ' and B which is applicable an A A light automatic gunner—H Q A \ light automatic gunner etc.

38. *Registers (all arms)*

1 Register of judging distance tests Army Form B 186 —

For use at judging distance tests Instructions for compilation are printed on the form

2 Company commander's roll for range practices Army Form B 189 — Rifle light automatic and revolver (For gallery rifle ranges—to be kept at the firing point)

i This form will be used for all open range practices of Tables A or B and for the Revolver Course

ii Names will be entered in order of sections before going to the range but the order of firing will not be inserted until men are detailed to shoot

iii Occasional shots will be recorded on the back of the form

iv Should a practice be broken off the company commander will rule out the names of those who have not fired and fresh forms will be used when the practice is completed

v. The roll will be signed at the firing point

3 Butt register for rifle and revolver practices (gallery range). Army Form B 190 —

ii It will be kept by the officers on duty in the butts, in accordance with the instructions in Sec 3, para 15

iii On the conclusion of the practice a line will be ruled diagonally across the unused spaces the form will be signed and handed to the officer superintending at the firing point who will attach it to his roll

iv The register will be the record of the scores obtained

4 Firing point register for non-gallery ranges (30-yards and open). Army Form B 190A —

i This form will be used —

(a) On non gallery ranges

(b) By the Territorial Army, at the discretion of the brigade commander when it is not possible to arrange for the method under which the Register is kept in the butts

In both the above cases the regulations in Sec 3, 16, will be complied with

(c) On 30 yards ranges — In this case no other record will be kept (except such as commanding officers and company commanders require for their own information) and the regulations in Sec 3, 16, will be modified to suit the local conditions

ii This form will be used for recording the scores made in the practices of Table "A" fired on the 30-yards range

5 Butt register for light automatic practices. Army Form B 190B —

For use in the butts under the same conditions as for Army Form B 190 Used also for light automatic practices in conjunction with Army Form B 189

6 Butt memorandum — Non-gallery range Army Form B 67

To be used in conjunction with Army Form B 190A para 4 above) in accordance with regulations in Sec 3, 16 on an open range Not normally required on a 30 yards range

7 Register for collective battle practices Army Form B 62 —

This register will be completed as soon as possible after return to barracks and will be produced by company commanders for inspection when called for

Extracts will be made as considered desirable by commanding officers for entry in battalion orders and in the battalion permanent record of collective battle practices

39 Vickers machine gun returns etc

1 Machine gun firing point register Army Form B 2050 —

This form is used as a register at the firing point for machine gun practices

2 Machine gun butt register Army Form B 2050A —

This is the butt register used in conjunction with Army Form B 2050

3 Machine gun officers ammunition book Army Book 99 —

This book contains a record of the ammunition expended on machine gun practice

4 Annual machine gun course return (Regular Army) Army Form B 192M —

This form contains the record of the year's training and performances

5 Annual machine gun course return (Territorial Army) Army Form L 570 —

This form contains the record of the year's training and performances

40 *Metal fund*

1 A fund formed from the sale of metal recovered from rifle ranges will be established in each command

2 The metal will be disposed of to the best advantage under the orders of the general officers commanding in-chief due regard being paid to the Woolwich half yearly price list for old metal In the case of stations abroad the metal may under certain circumstances be returned to Woolwich for disposal (see Regulations for Army Ordnance Services Part I)

3 The collection of metal from the butts is the duty of

4 General officers commanding in-chief may, at their discretion, authorize payments to range wardens of such sums as they consider suitable for the collection and storage of metal. These payments will be defrayed from the metal funds and no charges will fall on any public funds.

5 In the case of ranges in barracks, metal will be collected under regimental arrangements, and disposed of as may be directed by the general officer commanding in chief.

6 After payment of any necessary expenses connected with the collection, storage and despatch, and also for the prevention of theft of metal etc. the sums realized will be allotted by general officers commanding in-chief for such purposes as prizes and payment of markers at rifle meetings.

7 Should the sums accruing from the sales exceed the foregoing demands, general officers commanding in-chief are authorized to expend any surplus on the preparation of ground for battle practices, battle firing, and other aids to weapon training for which funds are not otherwise provided, but not on the purchase of ammunition, the money so expended will be shown on Army Form N 1472.

8 Army Form N 1472 will be completed at the end of each financial year and rendered to the local auditor attached to the command, or, in the case of commands in which there is no local auditor, to the Under-Secretary of State, The War Office.

CHAPTER VII

TESTING ARMS

41 *General*

1 Where there is reason to believe that a small arm weapon is inaccurate after such adjustments and changes of foresight as are permissible have been carried out by the armourer and no further cause for the supposed inaccuracy can be found it will be tested regimentally

In the case of a rifle the test will be of the barrel only In the case of light automatics or machine guns, the test will be firstly of the barrel, and if this is proved to be accurate then of the weapon as a whole

2. Where units have not the facilities for carrying out these instructions the commanding officer will arrange for another unit to carry out the test

3 In order to ensure that reliable data are obtained, the following rules, common to all small arm weapons, must be observed in conducting the tests :—

- i A good shooting day will be chosen
- ii A skilled and reliable man will be selected
- iii The weapon will be carefully cleaned and prepared
- iv Ammunition of the most recent manufacture available will be used It must not be

exposed to extremes of heat or cold nor will a cartridge be inserted into the chamber until all is ready for firing a shot

- v The diagrams obtained will be sent without calculations to the Chief Inspector of Small Arms Enfield Lock Middlesex and the barrel or weapon retained pending his instructions *
- vi The various headings of A F B 202 except those relating to figure of merit will be filled up giving full particulars regarding the mark source of manufacture of the weapon or barrel and the mark lot date and place of manufacture of the ammunition The direction and strength of the wind will be noted

42 Rifles detailed procedure

1 Rifles No 1 S M L E 303 inch

- i *The rifle* will be fired with its own bolt
- ii *Firing position*—Lying from the shoulder, wrist but no part of the rifle supported on sandbags or other suitable rest
- iii *Range*—400 yards
- iv *Target*—6 foot white with black aiming mark which will be so placed on the target as to allow for any wind there may be

* In the case of 2nd inch rifles and revolvers the targets will be forwarded The targets of the former will be accompanied by twenty five rounds of the ammunition used

- v *Sights* — Will be set to a definite graduation and the elevation will be such that shots strike approximately at the centre of the target. The windgauge if any will be set central.
- vi *Aim* — Regulation. Any deflection necessary to allow for wind etc. will be given by placing the aiming mark where required on the target so that shots strike approximately at the centre of the target.
- vii *Sighting shots* — As required to determine elevation and deflection.
- viii *Harriers* — Two immediately before firing the group.
- ix *Number of rounds* — Ten rounds will form the group and will be fired with the greatest care and without any change of aim.
- x *Record of test* — The height and width of the rectangle containing the group will be measured in inches. The diagram will be recorded only —
 - (a) If either of the sides of this rectangle exceed sixteen inches.
 - (b) If the centre of the group as estimated by the testing officer is more than eight inches in any direction from the point of aim.
- xi *Diagram* — The position of the point of aim and of each shot will be transferred to A F B 202 by recording their positions as measured first horizontally then vertically,

from the left edge and bottom edge respectively of the target. Hits will be numbered in the order in which they are fired. This will be noted by the markers. Measurements will be given in inches to one place of decimals.

- xii *Misses* —If there are less than ten shots on the target and the size of the group obtained comes within the limits laid down the group will be repeated once with such change of elevation and direction as may seem necessary to bring all the shots on to the target.

Should however the size of the group obtained with a portion only of the shots be already greater than the limits laid down the diagram will be recorded without repetition of the group and the form endorsed — shots only on the target.

- xiii *Checking* —A check group should be fired with a known good rifle by the same firer using the same ammunition under identically the same conditions. This diagram will be completed and attached to the report on the rifle or rifles suspected of inaccuracy.

2 *Rifle No 2 22 inch*

- i *The rifle* will be fired with its own bolt.

- ii *Firing position* —Lying from the shoulder wrist but no part of the rifle supported on sandbags or other suitable rest.

-
- iii *Range* —25 yards
 - iv *Target* —Stout cardboard covered white paper, about eighteen to twenty four inches square, two one inch square black aiming marks evenly spaced over the surface
 - v *Sights* —Normal for 25 yards, windgauge central
 - vi *Aim* —Regulation
 - vii *Sighting shots* —None unless found necessary owing to large errors in sighting
 - viii *Warmers* —Two immediately before firing the groups
 - ix *Number of rounds* —Five rounds will form a group and two groups—one at each of the aiming marks—will be fired with the greatest care and without any change of aim
 - x *Record of test* —The height and width of the rectangle containing each group will be measured in inches. Should either of the sides exceed one and a half inches in either group a further test will be carried out for keyholing
 - xi *Keyholing* —(Irregular shape of shot holes due to the bullets not flying true) A plain white cardboard similar to that used for grouping, but without aiming marks, will be firmly fixed exactly at right angles to the trajectory. The rifle will be cleaned, and after firing two warmers, ten rounds will be distributed over the target

- xii *Diagrams* —Diagrams will not be taken, but where a barrel has been found to be inaccurate, both targets will be dealt with as described in Sec 41, 3, v
- xiii *Misses* —All five shots of each group must be within the limits of a square of one and a half inches. Should there be less than five shots in either of the groups and these shots are within the limits laid down, the groups will be repeated once. If the limits are already exceeded the group will not be repeated and the target will be endorsed—" shots only on the target "
- xiv *Checking* —A check group should be fired with a known good rifle, by the same firer using the same ammunition under identically the same conditions. This group will be attached to the report on the rifle suspected of inaccuracy

43. *Machine guns and light automatics*

1. In order to distinguish between inaccuracy due

sights are brought on to the mark when laying, by elevating the rear of the gun so that play in the gear is always taken up in the same direction

2 Barrels when tested in this manner must group into a square of twenty four inch side at 400 yards. If the barrel fails to reach this standard it will be noted as inaccurate and exchanged.

If the barrel passes this test the gun as a whole will be tested by firing three ten round groups automatically as prescribed below. If the gun fails in this test a final check will be made by firing a further ten round group automatically with another gun. Vickers machine guns will be fired on the same mounting. The mounting itself must not be disturbed.

3 *Testing complete guns Procedure on the open range*

- i *Firing position* —Normal on firm ground
- ii *Range* —400 yards
- iii *Target* —6 foot white with black aiming mark which will be so placed on the target as to allow for any wind there may be
- iv *Sights* —Elevation will be such that shots strike approximately at the centre of the target
- v *Aim* —Regulation. Any deflection necessary to allow for wind etc. will be given by placing the aiming mark where required on the target so that shots strike approximately at the centre of the target
- vi *Sighting shots* —As required to determine the elevation and deflection

- vii *Warmers*—Twenty-five immediately before firing the first group
- viii *Number of rounds*—Ten rounds will form a group and will be fired as follows —
Vickers machine gun—in a single burst
Light automatics—in bursts of four to five rounds relaying for each burst
Three groups will be fired. If a stoppage occurs with a Vickers gun the group will be repeated
- ix *Record of test*—The height and width of the rectangle containing the group will be measured in inches. The diagram will be recorded only —
(a) If either of the sides of any of the three rectangles exceed thirty-six inches
(b) If the centre of a group as estimated by the testing officer, is more than twelve inches vertically or eight inches horizontally from the point of aim
Should any one group of the series be accurate, a note to this effect will be appended to the diagram of the inaccurate group or groups
- x *Diagram*—The position of the point of aim and of each shot will be transferred to A F B 202, by recording their positions as measured, first horizontally, then vertically, from the left edge and bottom edge respectively of the target. Measurements will be given in inches to one place of decimals
-

vi *Misses* —If less than ten shots are on the target in any of the groups and the group comes within the limits it will be repeated once with such change of elevation or direction as may appear necessary to bring all the shots on to the target. If the size of the group is larger than the limits laid down the diagram will be recorded without repetition and the form endorsed—shots on the target

vii *Checking* —A check group should be fired with a known good gun by the same firer using the same ammunition under identically the same conditions. The diagram will be completed and attached to the report on the gun or guns suspected of inaccuracy

4 *Procedure on a 30 yards range* —As a rough check to see whether the accuracy of barrel gun and mounting is maintained during training testing may be carried out on a 30 yards range as follows —

- i *Firing position* —Normal on firm ground
- ii *Range* —25 yards actual
- iii *Target* —Any convenient Aiming mark of suitable size
- iv *Sights* —Elevation will be such that shots strike well on the target
- v *Aim* —Regulation

- vi *Sighting shots* —None
- vii *Warmers* —None
- viii *Number of rounds* —Ten rounds will form a group and will be fired as follows —

Vickers machine gun—in a single burst

Light automatics—in bursts of four to five rounds, relaying between each burst

One group only will be fired unless the gun fails to pass the test, in which case the group will be repeated once. If a stoppage occurs with the Vickers gun the group will be repeated.

- ix *Record of test* —All ten shot holes must lie completely within a rectangle two and a half inches high by two and a half inches wide, for measuring which the 30-yards grouping rectangle will be used. This grouping rectangle, which measures two and a half inches by two inches, may be applied either vertically or horizontally, or both, to the group, whichever is most favourable. If the gun fails to pass this test at the second attempt it will be tested in the manner prescribed in Sec 43, 1, 2 and 3.

44. *Revolvers*

The following will be the detailed procedure for testing these weapons —

- i *Firing position* —Lying, sitting at a table or standing in a trench, using the overlapping

grip with both hands forearms supported by a sandbag or other suitable rest but no part of the revolver or hands must touch it
Elbows to be on the ground or table

- ii *Range* —20 yards
- iii *Target* —White cardboard with one inch square black aiming mark any convenient size
- iv *Aim* —Regulation
- v *Number of rounds* —Six rounds will form a

the group will be repeated once

- vi *Record of test* —The height and width of the rectangle containing the group will be measured in inches The revolver will be regarded as inaccurate —

(a) If the vertical side exceeds six inches or the horizontal four inches

(b) If the centre of the group as estimated by the testing officer is more than three inches vertically or two inches horizontally from the point of aim

- vii *Diagram* —A diagram will not be made but the target will be dealt with as described in Sec 41 3 v

viii

under identically similar conditions this group will be attached to the report on the revolver suspected of inaccuracy

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SMALL ARMS TRAINING, VOL. IV, 1931

APPENDIX I

ANNUAL COURSES FOR RIFLES
AND LIGHT AUTOMATICS

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APPENDIX I

ANNUAL COURSES FOR RIFLES AND LIGHT AUTOMATICS

1 Introduction

1 The courses have been designed on the following policy

- i Simplicity Number of tables reduced to the minimum
- ii To make young soldiers proficient with both rifle and Lewis gun early in their service when once proficient to save expenditure of ammunition on the trained soldier
- iii To save ammunition on the good shot and to devote it to the instruction of the bad shot
- iv In the Territorial Army to place the weapon training of the N C O as the primary consideration—that of the man being secondary

2 The first charge on the C O's pool will be for coaching rifles and light automatics to zero before comm

the annual weapon training courses. The second and third charges will be for the further instruction of bad shots and for battle practices respectively. For subsequent charges *see* Sec 20, 5

3 In order that weapon training efficiency may be maintained, the organization and execution of preliminary weapon training should be thorough, well thought out and systematic

Too much importance cannot be attached to the sys-

4 The small scope afforded by the ammunition allotment for field practices must be compensated for by additional and systematic attention to fire control and the combined employment of weapons, ground and formations during all periods of collective training, from section training onwards

5 The organization of competitions and rifle meetings within the unit assumes additional importance

2. Tables A and B

Table A is fired by recruits and Table B by trained soldiers, except personnel of the regular establishment at

have been fired on the 30 yards range to complete the whole course on such a range. The essential is to fire as many practices as possible on the open range.

- u (a) Parts V VI and VII will normally be fired on the open range on joining the unit in the same weapon training year as Parts I II III and IV were fired

(b) A recruit who commences to fire Table A before 1st November will complete the Table on joining his unit and will fire Table B during the same weapon training year. In such cases an interval

1. The first group of authors (e.g., [1, 2]) considers the problem of the control of the motion of a mechanical system with a variable structure. The control is determined by the law of change of the structure of the system. The control is determined by the law of change of the structure of the system.

- (c) All boys on coming on to man's service will be considered as recruits and will fire the whole of Table A. They will not fire any portion of Table B until they are in their 2nd weapon training year.

- (d) Recruits who are posted to the machine-gun company will complete Table A and will fire in addition the machine gun course prescribed for 1st year personnel

They will not fire any portion of Table B until they are in their 2nd weapon training year.

- (e) Further training of Unqualified Recruits and 3rd Class Recruit Shots

Recruits who fail to qualify in Table A Part III will after a suitable interval and

the staff of depots and the personnel of one L A section of each company in their second and subsequent weapon training years

- (b) One L A section of each company (1 NCO and 6 men) will fire Parts I II and IV instead of Parts I II and III The personnel of this section should be trained if possible for two consecutive years but for no longer period

- 11 *Total Exemptions*—The following will be wholly exempted from firing Table B and machine gun course where applicable —

Household Cavalry	Cav of Line	Inf of Line *
All Field Officers and Captains	All Field Officers and Captains	All Field Officers and Captains
Adj't	Adj't	Adj't
Q M	Q M	Q M
Director of Music.	—	—
Veterinary Officer	R S M	—
Regtl Cpl Major	Bandmaster	R S M
Regtl Quarter master	R Q M S	Bandmaster
Corporal	Farrier Q M S	R Q M S
Farrier Quarter master	Sqn. Sjt Major (exempted L A only)	C.S.M. (exempted L.A. and Machine Gun only)
Corporal.		
Sqn Cpl Major (exempted L.A. only)	Sqn S M Instructor of Fencing and Gymnastics	C Q M S (exempted L A and Machine Gun only)
Sqn Cpl Major In instructor of Fencing and Gymnastics	Sqn S M Riding Instr	O R Sjt
Sqn Cpl Major Riding Instructor	Sqn Q M.S (exempted L.A. only)	Band Sjt
Sqn Q.M Cpl (exempted L.A. only)	Ord Room Sjt	Pioneer Sjt.
O R Cpl of Horse	Band Sjt	Sjt Cook
	Saddler Sjt	Transport Sjt
		Offrs Mess Sjt
		Drum major

* These exemptions apply to depots as well as to battalions

Household Cavalry	Cav of Line	Inf of Line *
Band Cpl of Horse	Sjt Cook	Sjt Tailor High
Saddler Cpl of Horse	Farrier Sjt	land Regts
Cpl of Horse Tailor	Ofrs Mess Sjt	Pipe major High
Cpl of Horse Cook	Ord Room Clerk	land Regts
Officers Mess Cpl of	Farrier Cpl	Lowland Regts
Horse	Farrier	Irish Regts
Farrier Corporal of	Saddler	other than R
Horse	Saddle tree maker	Ulster Rifles
Farrier Cpl	Soldiers of over 18	Bugle major Light
Ord Room Clerk	years man's service	Infantry and Rifle
Bandsman	Boy	Regts
Farrier		Ord Room Clerk
Saddler		Farrier
Saddle tree maker		Saddler
Tailor		Pioneer
Soldiers of over 18 years		Soldiers of over
man's service		18 years man's
Boy		service
		Boy

A brigade commander is authorized to allow total exemptions in the case of men attending a course of instruction the duration of which is six months or more and any vocational training course. Such exemption to be granted only in cases where attendance at a course of this nature prevents the individual concerned from being present when his unit is firing its annual course or when arrangements cannot be made for him to fire as a casual.

III *Partial Exemptions — †*

- (a) Trained soldiers in squadrons or companies—
 Rifle —Soldiers who obtained a score of 95 points and over in Table B, Part II, in the previous weapon training year, will in the

first instance fire Table B, Part I, in which they will be required to obtain a score of 90 points. If they obtain this score, they will retain their previous classification, will fire no further rifle practices in the year, and will fire Table B Part I in the following weapon training year. Should they fail to reach this score they will fire Table B Part II and will be classified on the scores obtained in this Part.

- (b) Trained soldiers in squadrons or companies—
L A. Soldiers who obtained a score of 95 points and over in practices 15 16 18 and 19 of Part III of this Table in the previous weapon training year, will in the first instance fire Table B Part III practices 13 14 15 and 16 and will be required to obtain a score of 40 points in practices 15 and 16. If they obtain this score, they will retain their previous classification, will fire no further L A practices in the year, and will again fire the same practices in Table B, Part III in the following weapon training year. Should they fail to reach this score, they will complete Table B, Part III, and will be classified on the original scores obtained in practices 15 and 16 plus practices 18 and 19.

- (c) Trained soldiers in H Q Wing* and I C drivers of machine gun squadrons (less those wholly exempted, and personnel detailed

* See footnote on page 13

as A A L A gunners) will fire Table B Parts I and II, under the same conditions as trained soldiers with sabre squadrons or rifle companies in accordance with para 2 i and 2 iii (a) above

- (d) Trained soldiers in machine gun squadrons or companies * will fire Table B, Part I, and Practices 7 9 and 11 of Part II. They will not be classified on these practices

Soldiers who were marksmen in Table B, Part II in the previous weapon training year or obtained a score of 90 in Table B, Part I in the current weapon training year will not fire practices 7, 9 and 11 of Part II, Table B and will retain their rifle marks man's badge † (see Sec 29, Vol IV, 1931)

- (e) Trained machine gunners who have left the machine gun squadron or company, will omit Table B Part III, and will fire instead a machine gun refresher course as laid down in Chapter III, Vol IV, 1931

Soldiers who were marksmen the previous year and who obtain a score of 90 points or over in Part I, Table B, will not fire Part II of Table B

- (f) Trained H Q anti aircraft L A gunners.*
-

including the N C O in command, will fire Table B, Part I and Practices 7 9 and of Part II, in addition to Part IV. They will be classified on the scores obtained in Part IV and not on the scores obtained with the rifle.

Soldiers who were marksmen the previous year and who obtain 90 points in Part Table B will not fire practices 7 9 and 1 of Part II Table B*.

- iv *Further Training of 3rd Class shots*—Soldiers classified as 3rd Class shots or 3rd Class L A gunners will after a suitable interval and further preliminary training repeat once the practices of Table B Part II or the Classification Practices of Parts III or IV as the case may be, so far as ammunition allows. They may be classified according to the total scores obtained in this repetition but not higher than as 2nd Class shots or 2nd Class L A gunners. They will be shown in the unit's weapon training returns according to their revised classification. The number of soldiers who repeat Parts II, III or IV will be noted in the unit's annual weapon training return.

A 3rd Class shot who reaches the standard of a marksman on repetition will in the following weapon training year fire the practices laid down for a non exempted man with the weapon concerned.

Sufficient ammunition for this repetition will

* They will retain their marksman's badge, but will not count as marksmen for purposes of computing the figure of merit.

	Min	Number of Rounds 1303 in		
		For Table	For C O s Pool	Total
TRAINED SOLDIERS—				
TABLE B—contd				
Trained soldiers with sqqs or coys exempted Pt II and Practices 17 18 19 and 20 of Pt III	30	97	153†	250
Trained soldiers with Hd Qr Wing less exemptions and A.A. L A Gns	30	75	—	75
‡Machine gunners	30	50	—	50
‡Ex machine gunners	30	75	75	150
H Q A A L A gunners	30	200	50	250
Wholly exempted	30	—	75	75
Trained soldiers at depots	30	80	145	225
Personnel of permanent staff at B T S Beachley	20	55	25	80
Sqn Cpl Major	30	75	175	250
Sqn S M and C S M				
Sqn Q M Cpl				
Sqn Q M S				
C Q M S				

* With regiment in the case of Household Cavalry and Cavalry of the Line.

† In the event of a partially exempted soldier being required to fire Part II or (and) Part III in accordance with Sec 3 2 (a) and (b) the necessary ammunition will be taken from the C.O.'s pool

‡ In addition to S.A.A. allowed for M.G. Course

NOTE—In cases where individuals are only required to fire Table B Part I the balance of ammunition allotted For Table will be transferred to C.O.'s pool

4. Regular Army (Brigade of Guards)

1 Recruits—

i TABLE A—

The Empire Test and Parts I II, III and IV will be fired at the depot or in certain cases at Pirbright or a similar camp under the same conditions as laid down in Sec 3 1, i Parts V VI and VII will be fired on joining the unit under the same conditions as laid down in Sec 3, 1 ii

Recruits will not be classified in Table A, but those who fail to qualify in Part III or shoot badly in Parts VI or (and) VII may repeat in accordance with Sec 3 1, ii (e)

ii TABLE B—

Subsequent to completing Table A, the recruit will fire Table B (less Part IV) forthwith (as a part of his recruits' course) and will be classified in the same way as a trained soldier Recruits who are posted to the M G Coy will fire Table B (less Part IV) at the discretion of the brigade commander

2 Trained Soldiers—

- i They will fire Table B under the same conditions as laid down in Sec 3, 2.
 - ii Partial exemptions will be governed by the same rules as laid down in Sec 3, 2 iii.
 - iii The following will be wholly exempted
-

	Min.	Number of Rounds (303 in		
		For Table	For C.O.'s Pool	Total
TRAINED SOLDIERS—				
TABLE B—contd.				
Trained soldiers with sqns. or coys. exempted Pt. II. and Practices 17, 18, 19 and 20 of Pt. III. . . .	30	97	153†	250
Trained soldiers with Hd. Qr. Wing less exemptions, and A.A. L.A. Gns.	30	75	—	75
†Machine gunners . .	30	50	—	50
†Ex-machine gunners . .	30	75	75	150
H.Q.A.A.L.A. gunners . .	30	200	50	250
Wholly exempted . .	30	—	75	75
Trained soldiers at depots . .	30	80	145	225
Personnel of permanent staff at B.T.S. Beachley . .	20	55	25	80
Sqn. Cpl. Major . .	30	75	175	250
Sqn. S.M. and C.S.M. . .				
Sqn. Q M. Cpl. . .				
Sqn. Q M.S. . .				
C.Q.M.S. . .				

* With regiment in the case of Household Cavalry and Cavalry of the Line.

† In the event of a partially exempted soldier being required to fire Part II or (and) Part III in accordance with Sec. 3, 2 (a) and (b), the necessary ammunition will be taken from the C.O.'s pool.

‡ In addition to S.A.A. allowed for M.G. Course.

NOTE.—In cases where individuals are only required to fire Table B, Part I, the balance of ammunition allotted "For Table" will be transferred to C.O.'s pool.

3 NCOs and Trained Soldiers on the regular establishment of the Guards Depot will be exercised and will qualify in accordance with Sec 3, 3 above

4 Allotment of Ammunition—

	Min	Number of Rounds 303 in.		
		For Table	For CO's Pool	Total
RECRUITS—TABLE A —				
At depot	100	100	25	375
With unit	—	225	25	
TABLE B —				
With unit		190	60	250
TRAINED SOLDIERS—				
TABLE B —				
Trained soldiers with coys	30	190	60	250
Trained soldiers of one L A				
Sec a coy	30	225	50	275
Trained soldiers with coys				
exempted Part II	30	150	100*	250
Trained soldiers with coys				
exempted Practices 17 18				
19 and 20 of Pt III	30	137	113*	250
Trained Soldiers of one L A				
Sec a Coy exempted Pt				
II	30	185	90	275
Trained Soldiers with coys				
exempted Part II and Prac				
tices 17 18 19 and 20 of				
Pt III	30	97	153*	250
Trained soldiers with Hd Qr				
Wing less exemptions and				
A A L A Gns	30	75	—	75
†Machine gunners	30	50	—	50
†Ex machine gunners	30	75	75	150
H Q A A L A gns	30	200	50	250

	Min	Number of Rounds 303 in		
		For Table	For C O's Pool	Total
TRAINED SOLDIERS—				
TABLE B— <i>could</i>				
Wholly exempted	30	—	75	75
Trained soldiers at depot	30	80	145	225
C S M }	30	75	175	250
C Q M S }				

* In the event of a partially exempted soldier being required to fire Part II or (and) Part III in accordance with Sec 3, 2, iii (a) and (b), the necessary ammunition will be taken from the C O's pool

† In addition to S A.A. allowed for M G Course

NOTE—In cases where individuals are only required to fire Table B, Part I, the balance of ammunition allotted 'For Table' will be transferred to C O's pool

5. Regular Army

(R.A.*, R.A.S.C. and R.A.O.C.)

1 All Personnel—will fire Practices A, B, C and D of the Empire Test as laid down in Table A.

2 A.A.L.A. Teams of the R.A. and R.A.S.C. (6 men, one of whom may be a bombardier, for each gun on peace charge) will, in addition to the Empire Test, fire Table B, Part IV, and be classified in accordance with the standards laid down. In units where two or more Lewis

* R.A. units of the South Irish Coast Defences may fire Table B, Part IV, on a 30-yards range

guns are allotted to headquarters the N C O in charge of the guns will also fire Table B Part IV In the case of anti aircraft batteries R A only two men for each gun on peace charge will be exercised as above The personnel of these teams should if possible be trained for two consecutive years but for no longer period

3 Exemptions —Officers above the rank of subaltern warrant officers and N C Os above the rank of serjeant and soldiers of over 18 years man's service will not fire Soldiers attending courses the duration of which is 6 months or more are also exempted

6 Regular Army (R E *)

1 Recruits —All recruits while with the Training Battalion Chatham or with the R E Mounted Depot Aldershot will fire Table A Empire Test Parts I II III V and VI They will qualify and classify in Parts III and VI respectively

be classified in accordance with the special standards laid down in Table B Part II

3 Trained Sappers of the Survey Battalion will fire Table B Parts I and II less Practice 12 once in three years They will be classified in accordance with the

* Units of the R.E. and Royal Corps of Signals of the ~~South~~ Irish Coast Defences may fire their annual weapon training ~~on~~ on a 30 yards range

special standard laid down in Table B, Part II. The recruits posted from the Depot Battalion, who have fired the prescribed portion of Table A, will count as if they had fired the above course.

4 Trained Sappers of Fortress Coys. Drivers, Personnel of other R.E. Units.—In their 2nd and subsequent weapon training years will fire Table B, Part I, less Practice 6, and Practices 7, 9 and 10 of Part II. They will be classified in accordance with the special standard laid down in Table B, Part II.

5 A.A.L.A. Teams (6 men for each gun on peace charge), and the NCO in command of HQ A.A. L.A. Guns will fire Table B, Part IV, and will be classified in accordance with the standards laid down. They will not fire with the rifle.

The personnel of these teams should be trained, if possible, for two consecutive years, but for no longer period.

months or more, are also exempted.

7. Partial Exemptions.—Trained snipers, S.G. (6 men, Squadrons and Field Companies—Depot gun on peace Bn and Mounted Depot, who obtain best, fire Table B, points and over in Table B, Part II, with the stan- ce weapon training year, will be treated as if they had 10 or more Lewis tions under conditions as laid down in Section 1. Snipers may fire Table B.

7 Regular Army

(R Signals * R A M C R A V C , A E C)

1 Royal Corps of Signals—

i Recruits will fire Table A Empire Test and Parts I and III

ii Trained Soldiers—will fire the following practices —

Instructional—Table A Part V practices 18 20 (without bayonet fixed) 22 and 24

Classification—Table B Part I practices 1 (in open) 2, 3 and 4 without bayonets fixed

Standard of Classification—1st class shot—55 points and over 2nd class shot—35 points and under 55 3rd class—under 35 points

Exemptions—Officers above the rank of subaltern warrant officers and NCOs above the rank of sergeant and soldiers over 18 years man's service will not fire Soldiers attending courses the duration of which is 6 months or more are also exempted

M C , R A V C , A E C —

Warrant officers recruits and trained soldiers of below the rank of corporal will fire Practices A B and the Empire Test as laid down in Table A

7. the R E and Royal Corps of Signals of the South Africa Forces may fire their annual weapon training course at the Defence Range

8. Allotment of Ammunition.

Regular Army—(less Household Cavalry, Cavalry of Line, Brigade of Guards, Infantry of Line)

	Min	Number of Rounds 303 in		
		For Table	For C O s Pool	Total
ROYAL ENGINEERS—				
RECRUITS	100	160	—	160
TRAINED SAPPERS OF Fd Sqn, Fd Coys Depot Bn, Training Bn Mounted depot Survey Bn	10	70	15	85
SURVEY BN—				
TRAINED SAPPERS of Fortress Coys—Other R E Units—Drivers	10	45	5	50
A.A. L.A. gunners	10	150	—	150
ROYAL ARTILLERY—				
All personnel	20	—	—	—
A.A. L.A. gunners	20	150	—	150
A.A. L.A. gunners of A A Batteries	20	150	100*	250
R A S C—				
All personnel	20	—	—	—
A A L.A. gunners	20	150	—	150
R SIGNALS—				
RECRUITS	20	45	5	50
TRAINED SOLDIERS	20	45	—	50
R.A.M.C.	20	—	—	—
R.A.V.C.	20	—	—	—
R.A.O.C.	20	—	—	—
A.E.C.	20	—	—	—

* For use against sleeve targets while in Practice Camp

The above allotments will be subject to restrictions laid down in Secs 5, 6 and 7.

All the competitions for the best shots of the squadrons or companies in a regiment or battalion are to be fired simultaneously on the same day.

The necessary ammunition for this competition will be obtained from the C O's pool

4 Personnel of the following categories of the H Q Wing will be entitled to wear the squadron or company badge (Star and Crossed Rifles) provided that in each case they have qualified as a marksman —

- i The best shot in Part I, Table B (of those who do not fire Parts II or IV)
- ii The best shot in Part II, Table B (of those who do not fire Part IV).
- iii The best shot in Part IV, Table B.

They will not be eligible to compete for the battalion badge

The method of awarding the best company shooting badges to the H Q Wing may be varied at the discretion of the C O to suit individual requirements.

10. O.T.C.

Every cadet who fires on the open or 30-yds range will fire the course laid down in Appendix VI (a) (1928) of O.T.C Regulations, 1921 (Reprint, 1925).

11. Territorial Army

(Yeomanry, Scouts and Infantry)

Notes —(1) All practices with .303 inch ammunition to be fired on the open range except as laid down in A.C.I 686 of 1924

5 A.A. L.A. Teams (3 men for each gun on peace charge) and the N C O in command of H Q, A.A. L.A. Guns will fire—

- i In their first year as A A L A gunners—Practices 21 23 (modified) and 24 of Table B, Part IV
- ii In their second and subsequent years—Practices 25, 26 27 and 28 of Table B Part IV

A A L A gunners must obtain 20 points in (i) above and 35 points in (ii) above in order to qualify for bounty or the musketry portion of the proficiency grant

6 Officers above the rank of subaltern, warrant officers, personnel of machine-gun squadrons or companies band drummers and signallers will not fire any practices Tables A or B

12. Territorial Army (R.A.)

A.A. L.A. Teams (3 men for each gun on peace charge) will fire—

- i In their first year as A A. L A. gunners—Practices 21, 23 (modified) and 24 of Table B, Part IV.
- ii In their second and subsequent years—Practices 25, 26, 27 and 28 of Table B, Part IV,

and will be classified in accordance with the standards laid down in Table B, Part IV.

13. Territorial Army (R.E.)

1. All recruits will fire Table A, Part II, less Practice 10

2 Trained Soldiers of and below the rank of sergeant will fire Practices A, B, C and D of the Empire Test laid down in Table A

3 A.A. L.A. Teams (3 men for each gun on peace charge) will fire—

- i In their first year as A A L A gunners—Practices 21, 23 (modified) and 24 of Table B, Part IV
- ii In their second and subsequent years—Practices 25, 26 27 and 28 of Table B Part IV,

and will be classified in accordance with the standards laid down in Table B, Part IV

4. Territorial Army (Other Units authorized to draw .22-inch Ammunition)

Subaltern officers and all other ranks of and below the rank of corporal will fire Practices A, B, C and D of the Empire Test laid down in Table A

Recruits of R Signals will, in addition, fire Table Part II, less Practice 10

15. Territorial Army (Permanent Staff)

Permanent staff of T A units below the rank of warrant officer Class II will fire the same weapon training courses as the T A unit to which they are attached

Their scores for classification will in each case be 10 points higher than those required for trained T A. soldiers.

16 Allotment of Ammunition (Territorial Army)

	Min	Number of Rounds 303 in		
		For Table	For C O s Pool	Total
YEOMANRY SCOUTS IN FANTRY—				
RECRUITS	20	65	10	75
TRAINED SOLDIERS (less all officers above the rank of subaltern warrant officers substantive NCOs personnel of band drummers signal lers L.A. sections A.A. L.A. teams M.G. sqns or coys)	20	40	10	50
L.A. sections (infantry)	20	44	16	60
Substantive NCOs	20	84	16	100
H.Q. A.A. L.A. gunners	20	50	10	60
ROYAL ENGINEERS—				
Recruits	15	25	—	25
Trained soldiers of and below rank of serjeant	20	—	—	—
A.A. L.A. gunners	15	50	—	50
ROYAL ARTILLERY—				
A.A. L.A. gunners	20	50	—	50
OTHER T.A. UNITS—				
All personnel (less officers above the rank of sub- altern and other ranks above the rank of cor- poral)	20	—	—	—
Recruits of R. Signals	20	25	—	25

17 Supplementary Reserve

Will fire miniature range practices as laid down for corresponding units of the Territorial Army Recruits R E will fire Practices A B C and D of the Empire Test Allotment of ammunition—20 rounds 22 inch R F

18 Malta Militia R E

All personnel will fire the same courses as laid down for R L T A
Allotment of ammunition as laid down in Sec 16.

19 Militia

King's Own Malta Regiment

Personnel will fire the same courses as for corresponding units of the T A and will be classified in accordance with the standards of classification laid down for the T A

Allotment of ammunition as laid down in Sec 16.

Bermuda Volunteer Rifle Corps

As for Sec 19

20 General Instructions

1 The dress for each Part of Tables A and B is laid down in the Tables

In practices fired in the kneeling position, soldiers who wear spurs may adopt either the kneeling or the sitting position

2 It is desirable that not more than 3 practices should be fired in one day and that when a rifle practice consisting of more than 5 rounds is fired not more than one

other practice should be fired on the same day This instruction may be waived at the discretion of commanding officers, who may also permit corresponding adjustments in the sequence in which practices are fired

3 The standards for classification are laid down in Tables A and B

4 The ammunition allotted to the C O's pool is to be used in the following order of precedence—

- i For correcting rifles and light automatics to zero before commencing the annual course
 - ii To exercise 3rd class and if possible other bad shots and in the case of the Territorial Army for the preliminary training of L A gunners
 - iii For battle practices
 - iv For occasional shots
 - v For regimental rifle meetings
 - vi Practice for competitions
- 5 Troops not normally armed with the bayonet will not fire any practices with bayonets fixed

TABLE "A."
 Coaching at the Firing Point will be carried out in all Practices
 of this Table.

No	Practice	Target	Distance in yards	Rounds	Detail	Remarks
	Preliminary Practices	Representative	Representative	60	Fired at the Depot MINIATURE RANGE Practices to be arranged by Depot Commander	For details of targets, see Sec 49, Vol V, 1930 Dress Regular Army—Drill Order, canvas or service dress for all miniature range practices Territorial Army—Drill Order In the event of musketry being carried out in plain clothes under Territorial Army Regulations the equip- ment of Drill Order will be worn over plain clothes

TABLE 'A'—(contd) EMPIRE TEST AND PART I

No	Practice	Target	Distance in yards	Rounds	Detail	Remarks
					EMPIRE TEST	AVERAGE SCORES (as a guide only) 1st Class 20 2nd Class 15
TA	Group ing	Small	Representative 200	5	Lying in the open	H P S 25 20 15
TB	Slow	Small	" 200	5	Lying in the open	H P S 20 15 11
TC	Slow	Large	" 500	5	Lying in the open	H P S 20 8 5
TD	Snap shoot ing	Small Snap shooting	" 100	5	*Standing in a trench 5 secs each exposure with 5 secs interval	H P S 15 12 9
			Total Rounds	20	The rifle may be in the aim before the target appears	80 55 40
	As for practices A, B, C and D above			20	REPETITION OF EMPIRE TEST In the case of cavalry Brigade of Guards Royal Engineers and infantry of the Regular Army, each practice may be fired twice to	* If a trench cannot be built or improvised, this practice may be fired lying behind cover with rifle rested
					Standard of Classification 1st Class, 55 points and over 2nd Class 40 points and under 55 points 3rd Class under 40 points	

Summary of Min Ammunition				No of Rounds	
Instructional Prac tices i e., teach ing the recruit				60	
Test (with repe tition)				40	
Total rounds				100	
Every recruit will next fire on the 30 yards range					
Dress					
Regular Army— Pacifists—Drill Order					
Canvas or service dress for all practices in Pts I II III and IV					
Trained men—See Sec 3, 3, Vol IV 1931					
Territorial Army—Drill Order In the event of musketry being carried out in plain clothes under Territorial Army Regulations, the equip ment of Drill Order will be worn over plain clothes					
Give the recruit an opportunity of reaching the high est standard The highest of the two scores obtained in each practice will be taken to count in the aggregate score					
Part I (Rifle) Preliminary					
30 YARDS RANGE					
Lying with rifle rested				5	
Lying with rifle rested				5	
Lying in the open				5	
Lying in the open Rifle loaded, sights adjusted, and safety catch forward Butt and nose cap to be touching the ground until the command "Fire" is given				5	
Total Rounds Pt I				20	
Small 200 yds				30	
Small 200 yds				30	
Small 200 yds				30	
Small 200 yds				30	
Group ing				30	
Slow				30	
Group- ing				30	
Timed				30	
Time, 60 secs					

ties do not exist for raising and lowering the target this practice may be carried out by word of command with the target exposed

Small representative target will be used when this practice is fired on the 30 yards range

When Pt III is fired on 30 yds range the practices will be the same as on the open range except that representative targets will be used

* Trained soldiers at Infantry Depots will fire this practice wearing respirators

sights adjusted and safety catch forward Butt and nose cap to be touching the ground before each exposure 10 sec for each shot

Kneeling in the open

Part III (Rifle)
Elementary Test
OPEN RANGE OR
ALTERNATIVELY 30
YDS RANGE

Lying in the open

Lying in the open *
Lying in the open
Rifle loaded
sights adjusted
and safety catch
forward Butt and
nose-cap to be
touching the
ground before each
exposure 5 sec for
each shot

5

30

5

5

5

Large

Total
rounds
Pt II

100

200

200

T10 Slow

T11 Grouping
T12 Slow
T13 Snap-
shoot

STANDARD OF QUALIFICATION OF RECRUITS—55 Points.
Each practice in Pts. II and III may be repeated one or more times at the discretion of the C O up to the limit of the ammunition (25 rounds a man allotted for repetition). A recruit may repeat one or more times any practice

i In Part II,
ii In Part III,
provided that he has failed to qualify in that part

The ammunition allotted for repetition is not to be regarded as an allotment to each individual recruit. It is provided for the further training of the more backward recruits.

* At 25 yds sights should be set at the elevation required to hit the point of aim.

Part IV Light Automatic Preliminary

30-yards Range
The five rounds to be fired singly at the same aiming mark. Object—To test accuracy of aim combined with trigger pressing

5

25*

Plain screen with 1 inch black aiming mark

16 Single Shot Group-16

Detail	Remarks
<p>be fired in 4 series of 4 or 5 shots each at different aiming marks. Object -- to teach holding and aiming</p>	<p>Each burst will be marked both for grouping and for application. The two markings being added together to obtain the score for each burst.</p> <p><i>Scoring</i> -- If 4 shots with in 2 inch ring 10 points If 4 shots within 3 inch ring, 8 points If 4 shots within 4 inch ring 2 points</p> <p>If mean point of impact of burst is --</p> <p>Within 2 inches of point of aim 10 points Within 3 inches of point of aim, 8 points If 1.5 for each burst, 20 points</p> <p>Summary of Ammun- ition fired in Table "A"</p> <p>at Depot</p> <p>nary</p>

ing	up	air		4 - 44	Service dress or canvas for all practices in Pts V, VI and VII <i>Trained men—See Sec 3 3 Vol IV, 1931</i>
(X) (Y) T 19	Group ing	Grouping	100	5	
(X) (Y) T 20	Slow	Small	200	5	
(X) (Y) T 21	Snap-shoot ing	Large Snap shooting	200	5	<i>Territorial Army—Drill Order</i> In the event of musketry being carried out in plain clothes under Territorial Army Regulations the equipment of Drill Order will be worn over plain clothes

Rounds	Detail	Remarks
5	Standing, taking cover in a trench provided with an elbow rest	
10	<p>Standing, taking cover in a trench provided with an elbow rest. Firer to be in the "Position of Readiness" (with bayonet unfixed), until the target appears. Rifle loaded with 5 rounds, sights adjusted, safety catch forward. Remaining rounds in the pouch or bandolier, which is to be buttoned. The whole of the rifle concealed. Loading after the first 5 rounds will be from the pouch</p>	<p>(XY) Denotes practice counting for classification for trained soldiers and substantive NCOs. Territorial Army. If a trench cannot be built or improvised, this practice may be fired lying behind cover with rifle rested</p> <p>Territorial Army TRAINED SOLDIERS AND SUBSTANTIVE NCOs. Standard of Classification</p> <p>H.P.S 155</p> <p>1st Class Shot 100 points and over. 2nd Class Shot 65 points and under 100 points.</p>

24	Snap-shooting	Large snap shooting	300	5	or bandolier, the rifle being kept on the top of the parapet. Time 1 minute Standing, taking cover in a trench provided with an elbow rest. Firer to be in the Position of Readiness (with bayonet unfixed) until the target appears rifle loaded sights adjusted safety catch forward the whole of the rifle concealed. Firer will return to the "Position of Readiness" after each shot. Exposure 5 secs for each shot.
25	Slow	Small	300	5	Kneeling in the open
26	Slow (Gas)	Small	300	5	Lying in the open wearing respirator
27	Slow	Large	500	5	Bayonet fixed for Lying with rifle rested
			Total Rounds		
			Pt V		55

3rd Class Shot under 65 points

24	Snaps- shoot- ing	Large snap shoot- ing	300	5	or bandolier, the rifle being kept on the top of the parapet Time, 1 minute Standing, taking cover in a trench provided with an elbow rest. Firer to be in the "Posi- tion of Readiness" (with bayonet un- fixed) until the target appears. rifle loaded, sights adjusted, safely catch forward the whole of the rifle concealed Firer will return to the "Position of Readiness" after each shot Exposure 5 secs for each shot Kneeling in the open Lying in the open wearing respira- tor Bayonet fixed Lying with rifle rested
5	Slow Slow (Gas) Slow	Small Small Large	300 300 500	5 5 5	
			Total Rounds Pt V	55	

ABLL A —PART VII (cont'd)

[Appendix I

No	Practice	Target	Distance yards	Rounds	Detail	Remarks
T-34 (C) (X) (S)	Action and Distri- bution	L A Screen	300		<p>The plates The firer observes Instructor orders stop ascertains firer what he is to do to observe effect of orders a hit at the target at the end of the exercise conclude that last at the true firer orders Cease firing 3 rounds in 2 magazines (15 in one and 10 in the other) Nos 1 and 2 will be in the</p>	<p>Scoring— If P.S. 40 points (C) denotes practice counting for classification for Regular Army (X) denotes practice counting for classifica-</p>

tion for trained soldiers of Territorial Army (Y) denotes practices counting for classification for substantive NCOs of Territorial Army.

Note—If no 400 yards range is available practices 3 and 34 will be tried at 200 yards 1 y
T A

TERRITORIAL ARMY

SUBSTANTIVE NCOs
AND TRAINED SOLDIERS
OF L A SECTIONS
Standard of Classification

Loop

H P S 40

1st Class L A gunner 30 points and over
2nd Class L A gunner 20 points and under 30
3rd Class L A gunner, under 20 points

aiming position about 5 yards behind the firing point with gun and ammunition a Sights at 0 On the order Take Post being given by the conducting officer the firer places the magazine containing 15 rounds on the magazine post but does not load or adjust his sights On signal action, Nos 1 and 2 will move to the firing point mount the gun load and fire *The firer should start at one end of the target and distribute rounds in three bursts then change magazines and begin firing at the other end of the target distributes two bursts in the reverse direction*
Time, 60 seconds

of Territorial Army
(Y) denotes practices
counting for classifica-
tion for substantive
NCOs of Territorial
Army
Note — If no 900 yards
range is available prac-
tices 33 and 34 will be
fired at 200 yards by
1 A

TERRITORIAL ARMY

SUBSTANTIVE NCOs
AND TRAINED SOLDIERS
OF L A SECTIONS
Standard of Classifica-
tion

II P S 40
1st Class L A gunner, 30
points and over
2nd Class L A gunner,
20 points and under 30
3rd Class L A gunner,
under 20 points

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SMALL ARMS TRAINING, VOL. IV, 1931

APPENDIX II

ANNUAL MACHINE GUN COURSE

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APPENDIX II

ANNUAL MACHINE GUN COURSE

1. Allotment of Ammunition—Regular Army

Each officer, N C O and man Regular Army machine-gun squadron or company

Part		1st Year	2nd and subsequent years	After leaving the M G Squ or Coy whilst still serving
Part I	I	130	—	—
"	Ia	—	100	100
"	II (Table I)	380	—	—
"	II (Table II)	—	310	—
"	III	140*	180*	—
"	IV	110*	130*	—
Total		760	720	100

2. Allotment of Ammunition—Territorial Army

Each officer, N C O and man Territorial Army machine-gun troop or company.

* These rounds will be pooled and expended collectively in exercises selected for Parts III and IV.

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SEC	PAGE
1 Allotment of Ammunition—Regular Army	3
2 Allotment of Ammunition—Territorial Army	3
3 Parts I and Ia	4
4 Part II, Tables I and II	7
5 Parts I, II and III—Territorial Army	22

Nature of practice	Target	Object of practice and method of conducting
Grouping Rounds—10	Plate of	To find the sighting elevation necessary to hit the point of aim. Fired in two spaced groups of 5 rounds each directed on two different aiming marks.
Single shot traversing Rounds—0	do	To practice automatic tapping. Fired in two traverses of 10 single shots each one to the right and one to the left. The firer must observe his target and not use his tangent sight (which, however, will remain raised) except for the initial laying at the commencement of practice and as ordered during it.
Single shot controlled corrections Rounds—12	do	Fired in two series (a) 6 rounds to practice relaying after correction in elevation. (Direct fire.) The firer is told to lay with correct sighting elevation to hit the right bottom bull (single shot load) the order 'Fire' is given followed by Up 150 — Go on — Up 400 — Go on — Down 150 — Go on — Down 400 — Go on — Up 530 — Go on. Instructor will watch and check any failure to relay. The corrections given should bring the shots approximately on to the 2nd 4th, 3rd 1st, 4th bulls respectively from the bottom. (b) 6 rounds to practice readjustment of line of sight in indirect fire. The firer is told lay with the correct sighting elevation to hit the second bull from the bottom of the left strip. The instructor bar deflection foresight, tells

3 *Details of Part 1a —*

Part 1a, 2nd and subsequent years

100 rounds for each man will be pooled and used for further instruction on the 30 yards range to give practice in the following—

Backward men—Part I

Remainder—i Immediate action (night and day)

ii Night aiming and firing

iii Fire discipline Using landscape targets with harmonized sights

iv Other practices at the discretion of the squadron or company commander

4 Part II—Tables I and II

1 Part II is divided into Tables I and II

The first year man will carry out TABLE I

The second year man will carry out TABLE II

The tables consist of —

i Instructional practices

ii Classification practices

In both tables Practices 6 and 7 are carried out without ammunition and Practice 8 may be fired on a 30 yards range. In Table I they are instructional, and in Table II classification practices

Practice II is carried out on a Battle Practice Range during the firing of Part III. The remainder of the practices are fired at 600 yards range. The details of the practices are given in the subsequent paragraphs and in the tables on pages 21 and 22

No man will carry out Tables I and II in the weapon training year.

3 *Details of Part 1a.*—

Part 1a, 2nd and subsequent years.

100 rounds for each man will be pooled and used for further instruction on the 30 yards range to give practice in the following—

Backward men—Part I.

Remainder—i Immediate action (night and day).

ii Night aiming and firing.

iii Fire discipline Using landscape targets, with harmonized sights

iv Other practices at the discretion of the squadron or company commander.

4. Part II—Tables I and II

1 Part II is divided into Tables I and II.

The first year man will carry out TABLE I.

The second year man will carry out TABLE II.

The tables consist of —

i Instructional practices

ii Classification practices

In both tables, Practices 6 and 7 are carried out without ammunition, and Practice 8 may be fired on a 30-yards range In Table I they are instructional, and in Table II classification practices

Practice II is carried out on a Battle Practice Range during the firing of Part III The remainder of the practices are fired at 600 yards range The details of the practices are given in the subsequent paragraphs, and in the tables on pages 21 and 22

No man will carry out Tables I and II in the same weapon training year.

PART I—INSTRUCTIONAL—*contd.*

No	Nature of practice	Target	Object of practice and method of conducting
3	<i>—contd</i>		firer the bottom bull represents his target post and to align his sight on it by moving tangent sight slide. He then orders "Single shot load," "Fire"—"Up 1" "other multiple of 15' (repeat 4 more times with different variations. Instructor checks line of sight after firer has fired. (The bulls being 15' apart the instructor must judge where the bullet should strike.)
4	Single shot oblique traversing Rounds—7	Plate 66	To combine automatic tapping with quick relaying. Fired at seven aiming marks respectively. Firer will only use his sights for relaying after having tapped in the ordinary manner.
5	Immediate action Rounds—40	Plate 67	To practise rectification of stoppages with ball ammunition using 40 rounds S.A.A. Belts are prepared beforehand with 6 stoppages for each firer, e.g., separated case, miss fire, bad fault of feed, thick rim (specially made)—2 successive miss fires, damage round empty pockets. The gun will be knocked off by the instructor as each stoppage occurs. Accuracy in relaying will then be seen from the size of the complete group.

Total rounds
Repetition

89
41

Total for Part I

130 for each man

2 Practice No 6 — Fire discipline (without ammunition)

1 *Object* — To test the man as No 1 of a gun in a direct fire unit in —

- (a) Recognition of the correct target and of the correct point of aim on the target
- (b) Correct method of traversing according to the method of fire ordered
- (c) Quick and accurate re-laying on order 'Stop'

2 *Description* — The practices will be carried out in the open country and when this is not feasible a landscape target will be used. It comprises three tests: the engagement of one point and two linear targets

3 *Preliminary arrangements* —

- (a) Equipments required: guns and tripods
- (b) Any suitable number of fire units (2 guns) may

planting an aiming lamp, relaying for direction and elevation

iii *Preliminary arrangements —*

(a) Equipment required—as for Section Drill, Night Firing

(b) Any suitable number of guns may be used simultaneously but the following are required to conduct the test —

For each four guns—one supervising officer

A conducting officer who will act as fire controller

One testing N C O for each gun equipped with torch and watch who should rehearse their duties beforehand

(c) The guns will be mounted with bar foresights and night firing sights affixed

(Ammunition boxes, condensers etc., not required)

Nos 1 will take post (Nos 2 are not required) Nos 3 for each gun will take post at the night firing box

iv *Method of conducting —*The supervising officer at his discretion will check the decisions of the testing N C Os

(a) *1st Night aiming test —*(Planting aiming lamp—no time limit)

(i) The testing N C O will lay the gun

his sights at 2,500 yards

ii Description — This is an instructional practice and will be fired at a large 6-foot (rifle) target at 600 yards. The practice will be fired in conjunction with and immediately after Practice 9.

iii Preliminary arrangements (Ammunition Table I—10 rounds Table II—20 rounds)

The 6 foot target will be hoisted at the commencement of Practice 9.

iv Method of conducting (No time limit) — By order of the supervising officer the firer will lay his gun on the target using the tangent sight.

The position of the centre of the group on the target will be signalled from the butts.

v Scoring — In Tables I and II for each hit on the target below and including ten 4 points. In Table II for each hit above ten 5 points.

7 Practice 11 — Observation and Registration
(On battle range)

This is an instructional practice and its object and description etc. is given in Sec 16 10 Vol IV 1931.

This practice should be fired during the firing of Part III.

The practice will be conducted in accordance with instructions laid down in Vol III.

8 Practices 12 and 15 — Traversing (Open range)

i Object — To teach aiming judgment of wind allowance at short range and maintenance of aim command with traversing.

ii Description — These are instructional or training practices according to their Table (see page

Targets —Two groups of five falling plates and one large 6 foot target. The plates in each group to be placed in a square of four feet with one of the plates in the middle of the square.

The groups and 6 foot target to be placed at intervals of 15 yards with the centre group at a different elevation.

iv *Method of conducting* —(Time allowed in Table I 110 seconds and in Table II 100 seconds.)

The gun will be mounted and loaded ready to fire. It will not be laid on either set of plates. In Table II the respirator will be worn.

The target will be exposed and timed from the butts. As soon as the target is up the firer will engage the left group of plates. When a plate falls a black or white marking disc will be shown in the butts immediately below the group.

The next group will then be engaged and when a hit is signalled the remainder of the rounds will be fired on the 6-foot target.

v *Scoring* —No hit will count on the 6 foot target unless both groups of plates have previously been hit.

Standard 'A' —If more than 5 hits on the 6 foot target.

" B " —If both groups of plates have been hit.

" C " —If both groups of plates have not been hit.

10 Practice 14.—Service application. (Engagement) (open range) —

i *Object* —To test the firer in mounting his gun at the lowest position, and engaging a fleeting target.

Practice	Target (S.A.T. Vol V)	Ranges Yds	Pds	Time in min	Remarks
Instructional					
Fire discipline	—	—	—	—	—
Night aiming	—	—	—	—	—
Maintenance of gun	—	25	40	—	—
Registration	1st	600	30	—	—
Application	Large 6 ft	600	10	—	—
Observation & registration	Groups of plates	1000	50	—	Fired with Part III
Traversing	(5) small 4 ft	600 etc.	50	—	
Classification					
Service Appli- cation (Semi- bulky)	2 groups plates and large 6 ft	600	70	110	—
Service Appli- cation (en- gagement)	Small 4 ft	600	40	120	—
Traversing	(5) small 4 ft	600	30* 60	25	*Prelimi- nary re- gistration
Total rounds, 380					

Table 11

1						
6 7 8	Classification Fire discipline Night aiming Maintenance of gun					
	Instructional Registration Application Observation & registration	N 1 Large 6 ft Groups of plates	600 60 100			
	Classification Traversing	(5) small 4 ft	600	60	0	To be fir con nct th 1 racti a and 2 sora tors to worn
13	Service Appli cation (flexi bility)	2 group plates and large 6 ft	60	0	1	
14	Service Appli cation (quick engagement)	Small 4 ft	600	40	110	

Total rounds 310

5 Parts I, II and III—Territorial Army

1 The Annual Machine Gun Course for the Territorial Army will be as laid down herein For targets
Vol V

The alternation of Part II, adapted for 30 yards range, included in the subsequent paragraphs

A recruit machine gunner (*i.e.* a man enlisted direct to the machine gun company, and to whom it is not practicable to give preliminary training in a rifle company) will fire —

Recruits' rifle practices, Table "A," Parts II and III and Practice 23 of Part V

Rounds allowed 65

The Annual Machine Gun Course, Parts I and II (less Practice 9)

Rounds allowed, 180

Recruit machine gunners will not be classified in the machine gun. They will qualify for the musketry portion of the proficiency grant

2 Details of Part I (T A)

Instructional.

To be fired at 25-yards range

No	Nature of practice	Target	Rounds	Remarks
1	Grouping	Plate 66	10	As for Practice 1, Regular Army.
2	Single shot traversing	do	10	As for Practice 2, Regular Army, but two traverses of 6 single shots each
3	Single shot controlled corrections	do	12	As for Practice 3, Regular Army
4	Single shot oblique traversing.	do	7	As for Practice 4, Regular Army
5	Immediate action	Plate 67	31	As for Practice 5, Regular Army.
Total Part I			70	

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APPENDIX III

ANNUAL REVOLVER COURSE

APPENDIX III

ANNUAL REVOLVER COURSE

To be fired by personnel of all Arms armed with the revolver other than Royal Tank Corps

1. The annual course.—The instructions as to the number to be exercised in the courses will be specified annually in Army Council Instructions.
2. The practices are as follows .—

Part I. PRELIMINARY (using sights)

Number and Practice	How fired	No of rounds	Range	Target	Score and H P S
Grouping	Single action Using the sights. Firer to return to the "Ready" position after each shot. Do.	4 each hand	Yards 10	4 ft with two 2 in aiming marks	No score— Faults to be carefully noted
		4 each hand	10	do.	H.P.S. 40. Standard required 24.

INSTRUCTIONAL (without using sights)

3	Application	Single action, without use of sights. Firer to return to "Ready" position after each shot. Time 1 sec for each shot. No standard interval between shots.	3 each hand	10	1 Fig 2	30
4	Do	Double action 3 secs for 3 shots	3 each hand	10	do	30
5	Application	Single or double action 1 shot at each target. Time 6 secs for practice.	4 either hand	10	4 Figs 2	20
6	Attack	Single or double action. Firer advancing 5 yds. Time 6 secs.	4 either hand	20 to 15	4 Figs 2 to 1 charging	20
7	Defence	Single or double action. Drawing the loaded revolver from the case. Time 4 secs.	2 either hand	15 to 5	2 Figs 2 both charging	10
8	Surprise and Disappear (Gas)	Single and double action. For each exposure 2 rounds to be fired the first by single action. Time for each exposure 2 secs. Respirators will be worn.	2 each hand	10	Fig 2 to be exposed and moved with a frontage of 3 yds 2 shots to be fired in each run of the target. Figs 2 and 4	20
9	Clearing trench *	Single and double action	12 right and left	Various		60 plus 10 for tactics Total 70

* Note — Targets should be arranged to require frequent change of hands

Part II. QUALIFICATION (without using sights)

Number and Practice	How fired	No of rounds	Range	Target	Score and H P S
10 Attack	• or double action • advancing 5 yds • 5 secs • and double action	4 either hand	Yards 15 to 10	4 Figs 2 1 charging	20
11 Defence	• Ready posi • for the first shot • allowed—2 secs • both shots, turned • ing point • and double ac • 2 secs for each • sure in which 2 • will be fired The • bot to be fired by • action the firer • urn to Ready • ion after each ex • e An interval of • s between each • ure Respirators • e worn	2 either hand	15 to 10	2 Figs 2 both charging	10
12 Surprise Disappearing (Gas)		4 either hand	10	1 Fig 2 (stationary) Each exposure will be at a different point on a front of 3 yards	20
Total viz	used for annual course any				72 16 38 10

INSTRUCTIONAL (without using sights)

3 Application	Single action without use of sights. Firer to return to Ready position after each shot Time 1 sec for each shot No standard interval between shots	3 each hand	10	1 Fig 2	30
4 Do	Double action 3 secs for 3 shots	3 each hand	10	do	30
5 Application	Single or double action 1 shot at each target	4 each hand	10	4 Figs 2	20
6 Attack	Time 6 secs for practice Single or double action Firer advancing 5 yds Time 6 secs	4 each hand	20 to 15	4 Figs 2 1 charging	20
7 Defence	Single or double action Drawing the loaded revolver from the case Time 4 secs	2 each hand	15 to 5	2 Figs 2 both charging	10
8 Surprise and Disappearing (Gas)	Single and double action For each exposure 2 rounds to be fired the first by single action Time for each exposure 2 secs Respirators will be worn	2 each hand	10	Fig 2 to be exposed and moved within a frontage of 3 yds 7 shots to be fired in each run of the target Figs 2 and 4	20
9 Clearing trench	Single and double action	12 right and left	Various		60 plus 10 for tactics Total 70

* NOTE --Targets should be arranged to require frequent change of hands

Part II. QUALIFICATION (without using sights)

Number and Practice	How fired	No of rounds	Range	Target	Score and H P S
10 Attack	Single or double action Fuer advancing 5 yds Time 5 secs	4 either hand	Yards 15 to 10	4 Figs 2 1 charging	20
11 Defence	Single and double action from Ready position for the first shot Time allowed—2 secs for both shots timed	2 either hand	15 to 10	2 Figs 2 both charging	10
12 Surprise and Disappearing (Gas)	Single and double action 2 secs for each exposure in which 2 shots will be fired The first shot to be fired by single action, the firer to return to Ready position after each exposure An interval of 2 secs between each exposure Respirators will be worn	4 either hand	10	1 Fig 2 (stationary) Each exposure will be at a different point on a front of 3 yards	20

72
16
38
10
8

under issued for annual course
primary

Practices mounted, in addition to the practices in Part II, will be fired by mounted troops, who have qualified in Part II, as follows —

Part III. (MOUNTED)—RIGHT HAND ONLY.

Number and Practice	How fired	Direction	No of rounds	Range	Targets	H P S
13 Attack at walk	Double action	Half right	4	Approx 10 yds	4, 4 ft as used for rifle	No score
14 Attack at canter	do	do	do	do	do	do.
15 Attack at walk	do	do	do	do	4 Figs No 2	20*
16 Attack at canter	do	do	do	do	do.	20*
17 Attack at walk	do	Half left	do	do	do	20*
18 Attack at canter	do	do	do	do	do	20*

* In addition points up to a maximum of 5 will be allotted for horsemanship by the officer conducting the practice

Total rounds

24 Ball, 24 Blank.

- 1 For Preliminary Instruction *see* Sec 20 Vol IV
 - 2 For position of targets *see* Diagram of Range Plate III Vol IV 1931 (page 83)
 - 3 The method of carrying the revolver during the practices will be as also in Plate II Vol IV (page 84)
- The method of firing the revolver will be by instinctive pointing sense without using the sights
- The revolver will thus be lowered to fire and raised again after each shot.
 - 4 For scoring details *see* paras 4 and 5 below

capable of movement On the command Fire one of the two moving Figs 2 (as indicated by conducting officer) will charge The firer will first fire at the charging target then advance 5 yards and fire at the remaining three

Where several firers are firing simultaneously the conducting officer must ensure that the advance by all the firers is simultaneous

6 Scoring—

Points

Practice 2—

Each shot within 8 inch \times 4 in rectangle	=	5
12 inch \times 8 in	=	4
16 inch \times 12 in	=	3

NOTE—The rectangle grouping measure (Plate 116 1 V) will be applied centre to the bottom of the ring mark

Practices 3 to 8 and 10 to 12

Each shot within 16 inch \times 12 inch rectangle	=	5
on remainder of target	=	3

Practice 9—

Each shot in the inner outline of the target	=	5
remainder of target	=	Nil
Practices	=	10

Practices 15 to 18

Each shot within the 16 inch \times 12 inch rectangle	=	5
on remainder of target	=	3
Horsemanship (each practice)	=	5

3 Course for the Territorial Army

i The course for officers warrant officers N C and men equipped with a revolver in time of war is

Preliminary—Part I Practices 1 and 2

Instructional—Part I Practices 3 and 4 of the ann revolver course for the Regular Army

Total rounds

28 ball

N B—This paragraph is in abeyance until further orders

ii Adjutants will draw ammunition and fire the course prescribed for the corresponding unit in the Regular Army

4 The targets and the methods of scoring are as follows —

- i The grouping practice target as described in Sec 52, 2 Vol V 1931 will be used

The two portions on each side of the vertical line are grouping targets for the right and left hands respectively as shown in Plate 109 Vol V

- ii The figure target No 2 will be marked with a rectangle as shown in Plate 111 Vol V

The waist line will be marked by a black patch in the centre to denote the point of aim

Figure target No 2 used for Practice No 9 (the Trench practice) will be marked with a line parallel with the edge $\frac{1}{2}$ inch distant to denote the inner outline of the target No rectangles see Plate 112 Vol V

- iv Practices 6 and 10 —Four figure targets No 2 two stationary and two on sledge (Plate 110 Vol V)

capable of movement. On the command "fire" one of the two moving files (2 men in each file; the conducting officer) will charge. The first will first fire at the charging target then advance 5 yards and fire at the remaining target.

Where several files are firing simultaneously with the conducting officer must ensure that the advance by all the files is simultaneous.

5 Scoring—

Practice 2—

	Points
Each shot within 8-inch \times 4-in rectangle	5
12-inch \times 8-in	4
16-inch \times 12-in	3

NOTE—The rectangle grouping measure (Plate 116 of V) will be applied centre to the bottom of the aiming mark.

Practices 3 to 8 and 10 to 12

Each shot within 16-inch \times 12-inch rectangle	= 5
on remainder of target	= 3

Practice 9—

Each shot in the inner outline of the target	= 5
Remainder of target	Nil
Tactics	= 10

Practices 15 to 18

Each shot within the 16-inch \times 12-inch rectangle	= 5
" " on remainder of target	= 3
Hors-manship (each practice)	= 5

Table II.

No	Practice	Target (S A F, Vol V)	Range yds	Rds	Time in secs	Remarks
6	Classification	—	—	—	Nil	part 3
7	Fire discipline	—	—	—	See p	
8	Night aiming	—	25	40	105	
	Maintenance of gun	—				
9	Instructional	Nil	600	30	—	Fired w part II
10	Registration	Large 6 ft	600	20	—	
11	Application	Groups of	1000	50	—	
	Observation & registration	plates				
12	Classification	(5) small	600	60	20	To be fir in con junctio with practic 9 and 1
	Traversing	4 ft				
13	Service Appli cation (flexi bility)	2 groups plates and large 6 ft	600	70	100	Respira ters to work.
14	Service Appli cation (quick engagement)	Small 4 ft	600	40	110	

Total rounds 310

5 Parts I, II and III—Territorial Army

1 The Annual Machine Gun Course for the Territorial Army will be as laid down herein For targets see Vol V

capable of movement. On the command "Fire" one of the two moving Figs. 2 (as indicated by conducting officer) will charge. The firer will first fire at the charging target then advance 5 yards and fire at the remaining three.

Where several firers are firing simultaneously the conducting officer must ensure that the advance by all the firers is simultaneous.

5 Scoring—

	Points
<i>Practice 2—</i>	
Each shot within 8 inch \times 4 in. rectangle	= 5
12 inch \times 8 in.	= 4
16 inch \times 12 in.	= 3

NOTE—The rectangle grouping measure (Plate 116 Vol. V) will be applied centre to the bottom of the aiming mark.

Practices 3 to 8 and 10 to 12

Each shot within 16-inch \times 12 inch rectangle	= 5
on remainder of target	= 3

Practice 9—

Each shot in the inner outline of the target	= 5
Remainder of target	Nil
Tactics	= 10

Practices 15 to 18

Each shot within the 16-inch \times 12 inch rectangle	= 5
on remainder of target	= 3
Horsemanship (each practice)	= 5

